



PHD

Exploring carbon reduction through tales of vision, chance and determination: developing learning histories in an inter-organisational context

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Exploring Carbon Reduction through Tales of Vision, Chance and Determination: Developing Learning Histories in an Inter-organisational Context

Margaret Rose Gearty

A thesis submitted for the degree of Doctor of Philosophy

University of Bath

School of Management

June 2009

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Abstract

In this work, the action research approach called learning history is being taken from its traditionally single organisation setting and into a field of local government organisations to address how a meaningful response to climate change might be accelerated through the connection of human experiences and situated learning. This thesis describes the development of what I now call “learning history in an open system” and explores the practice of it, its form, its scope and its potential for facilitating learning across a field. The inquiry brings narrative and participative approaches together with learning history to articulate a fresh methodological approach that has relevance for learning in any field of connected organisations. The thesis is itself presented as a layered learning and innovation journey reflecting in its form the subject of the research.

The subject of the study is technology-related innovation for carbon reduction. Five breakthrough low carbon projects from local government are featured. By creating learning histories of these projects the question of what it is to innovate has been explored, both narratively and analytically, not from a distance but from within the messy, uncertain human experience of change. The resulting picture, and one that is echoed in the journey of the research, is that of fallible humans innovating together with tenacity and vision in the face of shifting agendas and changing fortunes. The proposal is that innovation occurs in the micro-practice of the mundane moment, in well-timed ‘different moves’ involving non-heroic actors embedded with each other and with technology. The role of technology in this picture is explored and it is proposed this is a perspective that complements and challenges current models of sociotechnical transition in an interesting way.

It is by continuously expanding the narrative, theoretical and practical scope of this work, that a meaningful action research response to the ‘big issue’ of climate change has been sought.

Preface

It is July 2009. Two weeks ago I had my viva-voce examination in which I defended this thesis. And just last week the Lowcarbonworks project had its final project conference. This public funded project, of which my PhD has been a part started out about four years ago with high ambition. We wanted to explore how action research might help to create a step change in the adoption of low-carbon approaches and technologies.

We knew from the start of Lowcarbonworks that the impediments to change lay not with the technology itself but with a complex interlock of human, organisational and systemic factors. We talked a lot about being 'lock-in' back then. Lock-in was the force with which we would reckon, the puzzle we needed to unfurl. The question we asked was how might action research help society move away from its locked in dependence on carbon rich fossil fuel? Now at our final conference four years later, with some eighty cross-sector participants in the room, we still do mention lock-in in our presentations. But it is no longer central as an idea. It is just another story that helps us understand the world we are in. And alongside ideas like lock-in there are other stories at this conference. Real-life narratives: half a dozen of them or so, all featured in our final report. These narratives all include hard technology. One is about a zero-carbon factory in Sri Lanka, another about a waste-to-energy technology in Cornwall; a third is about compressed air as a possible carbon saving utility. But all the narratives are about more than the technology. They chart the highs, the lows, the sleepless nights, chance encounters, the grinding paperwork and re-worked ambitions of the people involved with these technologies. They hone in on what we call now the human dimensions of low-carbon technology. At the conference we run breakout sessions centred on these human narratives. Back at the café style table I am hosting, participants return fresh with anecdotes, links and insights from those breakout sessions. I notice how effortlessly they interweave what they have just heard with their own stories. I notice this in action and not for the first time I feel that thrill that narrative, story, learning history whatever I call it: '*really works!*' I feel a glow because what is happening today has in no small way been influenced by my work. The creativity of this conference and the beautifully designed report represent the project's overall embrace of new forms of learning history at the

wider systemic level. What is happening here has been influenced by the journey described in this PhD which set out to explore a new way of going about systemic learning with the purposes of working in some meaningful way with the issue of climate change.

And one of the stories featured at this conference is from my PhD research. It is the story of Southampton geothermal district energy scheme – a very successful carbon saving scheme run by the city council and its private partner Utilicom. Bill and Mike from Southampton arrive at the event and hug me warmly. I am pleased to see them again. In our breakout session it is the three of us that tell the story of this innovative project. I notice how I feel small but comfortable sitting between these two big guys and in that moment of noticing my eyes scan around and I clock that nearly all those who have turned up to my break-out session are men. Bill and Mike take turns to tell bits about the project. I intervene off the cuff to the audience pointing out the general themes that are implicit, or reflecting more generally or simply encouraging one or the other to go into the vignettes of the story that I know are significant. 'Can you tell them about the lightbulb moment?' I prompt. Or pointing to a truck with a huge 5.7Megawatt combined heat and power engine I ask Mike: 'Tell us about the story behind that picture?' I know the truck was so huge it stopped traffic on the M25 and that Mike heard this on national traffic news that morning. I know the whole story so well now. And internally, as I'm doing this I reflect: 'oh – this is like a live narrated learning history!' – and I make a mental note to tell some colleagues later. I know one or two who'll be interested.

On the wall behind us I have pasted pictures of the heavy technology and infrastructure of the Southampton project. I have juxtaposed these with pictures of partners and agreements. At the end of the conference, in plenary, participants are invited to comment on the day. Mike stands up and says how he has enjoyed the day and being involved in the research which he has found to be 'impressive'. He then goes on to say: 'we've known Margaret a long time now – it's nice to see her again – these days we consider her part of our team'. I feel touched on hearing this. And a little sad too. It is all coming to an end. And then I muse how strange it is to feel this genuine closeness because in spite of it all I only met Bill and Mike once. 'There's something about learning history I think', again not for the first time, that moves the researcher very deeply in relationship with her participants. I understand this now, though still not fully.

Later my supervisor Peter Reason asks to be introduced to Jane: the sustainability officer from our local council here in Bath who is also in attendance. Jane greets Peter and says: “the work with Margaret on Lowcarbonworks has made such a difference to us – I now have real support now at director level within the organisation to address climate change – and a big budgetary commitment”. I know this already, but somehow it is a surprise to hear Jane say it like that.

The PhD that follows charts how, using an action research approach to guide me, I came to embed myself with practitioners and organisations from the field of carbon reduction in local government in the UK. In that field I did some good work. And as we shall see, this research has built capacity, learning and connection there.

I started in the obvious places and with obvious questions. I started with the language of the field: “lock-in”, “transformation”, “change”, “innovation” and I worked with questions like “how do we change?” “What barriers are there to change?” My rationale was that action researchers need to get stuck right in on the coal-face of big issues like climate change and they need to start where the prevailing discussion *is*. Recently there has been talk of building bridges out of action research in order to do good work in the world (Reason and Bradbury 2008a). It is my belief that not only do bridges need to be built, but the action researcher needs quite resolutely to cross them and try out her practices of inquiry in another’s field and in the context of the unsolvable problems of our times. So it was to a thrusting, urgent and often unfamiliar field of carbon reduction in local government that I brought my practice as an action researcher and I brought myself. And here I am sitting quite comfortably in it a few years later.

An approach like this is not without its shadow. By embedding oneself in a field – by becoming *of* it rather than participating *with* it - a whole set of new questions emerge around identity, voice and what can and cannot be said. There are dangers of co-option, selling out or the silencing of what is important in order to belong. Choosing the obvious rules out the less obvious. By working with ‘change’ and ‘innovation’ as theories for example I have excluded theoretical perspectives on ‘power’ and ‘gender’. By working with the theme of ‘carbon reduction’ I have excluded a more systemic interpretation of sustainability. At the end I will reflect on these kinds of exclusion. They are partly

redressed by the form in which I have chosen to write this dissertation. But partly these exclusions are simply a facet of this kind of embedded action research out in the world and engaging with the agendas as they are understood and framed there. I am suggesting this is a valuable and important kind of action research and one that links to the big issues of our time. But, like any kind of action research it is not without its challenges.

The result has been a piece of work that had a number of levels of action and contribution. First there has been the outer arc of work in the field. This has been significant. A series of learning 'events' occurred across the field of local government of varying depth. These included focussed interviews, seminars and participative workshops and presentations. Some twenty organisations in all were involved in the research and seven of these participated over a sustained period. Many reported or continue to report, as Jane did above, the value of their participation in the research. This value I would simply term as rich: it includes tangible results – increased budgets for climate change, ongoing use of the learning histories – but it also includes some less tangible but nonetheless important impacts: a sense of connection, an increased personal efficacy. Some participants reported quite simply feeling more courageous and confident as a result of their participation. And many participants reported learning, by which I mean a deeper understanding of an issue of importance to them. For some this was to do with low carbon initiatives, for others it was to do with the process of change and for others it was to do with the power of narrative.

Then alongside the work in the field has been the research arc of the work. By pursuing the problem of 'carbon reduction' quite doggedly but inquiringly I worked my way onto new theoretical and methodological ground. Methodologically I set out to understand how more connected learning between innovative projects might occur at the systems level. To that end I developed an existing action research methodology – learning history – from its usual organisational situation into a broader institutional setting. Learning history is a reflective process that involves the creation of a written history of a project or event. The later stages of the process then go on to focus on the pragmatics of working with that history with participants to maximise the learning from it. The methodology I developed: 'learning history in an open system' pays much more attention to these later pragmatic stages of learning history than has hitherto been the case in the literature. My

detailed research work on these stages articulates the challenges of energy and sustained engagement that arise there. In my thesis I will propose practices to address these challenges. My 'learning history in an open system' also articulates and addresses a hitherto unspoken conundrum implicit within learning history that has to do with its underlying commitment to myth. The myth conundrum as I might call it arises for the learning historian who wishes to keep faith with the mythic imperative but who finds herself in a workworld that is reluctant to formally acknowledge stories as important. Hence the mythic is consigned to the nether corridors of gossip and tittle-tattle. In this work a practice of re-instating and re-valuing the mythic is proposed. Connected with this mythic imperative I have developed the form of the learning history itself, liberating it from its traditional 2-column form into a more fluid form. Learning histories have hitherto been written in two columns. In one column runs a narrated description. In the other runs quotes from participants and researcher reflections. These comment on and converse with the narrated column and so enrich the overall account. The learning history I am proposing has a written form that is more fluid and less constrained. I suggest too that a learning history can actually have multiple oral, digital and written incarnations. These developments in form not only embrace the mythic but also help to energise learning history as an approach overall. They help to broaden its scope and potential by making it lighter and more adaptable to learning situations with varying resources and aims.

My theoretical contribution develops a currently significant set of theories in the field of sustainability transition research: sociotechnical transition theory. I claim my theoretical contribution to lie in the way I worked with narrative to enhance and re-humanise this set of ideas. This field of sociotechnical theory has emerged in the last decade from the Netherlands and is becoming increasingly influential in policy-making and research there and more recently in the UK. It poses change and societal transition as the result of an evolutionary process where different levels of sociotechnical activity in society interact to create windows of opportunity for change to occur. The theory conceptualises transition as a complex, dynamic process of intertwined social and technological developments. And it offers a language to help unpick this process. However it is limited in a number of ways. Human action within this framework is abstracted to the level of structured agency. This abstraction curtails the possibility for drawing out practical implications from this theory. Second this theory conceptualises the societal landscape as a socially constructed one of material infrastructure and macro political and economic factors. The

natural world is curiously absent from a model which, at its heart, is trying to understand how we might transition to a society that is more connected with the earth on which we stand. And finally the language of these ideas, because of their lineage in economics and innovation studies can still tend to collapse back into being technocratic. In my research I engage with these critiques and suggest that my contribution has been to address these limitations through the use of narrative. I suggest that the human stories of my learning histories and the thematic vignettes that I will draw from across these histories, re-humanise this theory and so create a link back to the natural world. So my contribution is to open up a vital route to the practice of transition rather than the management of it.

My handling of theory in this thesis follows a more complicated path than that of method. I do not simply lay out sociotechnical theory and then develop it. Instead I describe the theoretical exploration that led me there. So I start with the 'carbon reduction problem' and with a different set of theory – organisational change theory. As it becomes clear that taking an organisational view is inadequate to the question of how a societal shift to a low carbon future might take place, I then chart how my focus moves away from this theory set. I drill down into theories that address the micro-level of individual choice. I reach out to theories that take into account the broader systemic level of inter-connected organisations and macro contextual factors. And ultimately I arrive in sociotechnical theory, explaining why it fits and laying the ground to develop it. I describe it like this because I am proposing that, in addition to the contribution to sociotechnical theory, the way I have worked with theory is relevant to the field of action research. I am suggesting that by working inquiringly with the theory, in the way that I do, I am examining more closely than is usual the link between theory and practice. I will return to this argument in the afterwords of the thesis. Suffice it to say for now that I am suggesting that the movement through theory is illuminating and relevant and so I have not confined my description of it to its start or end point.

This then is a summary of my proposed contributions: to the field in which the research took place as well as to the academy in terms of methodology and theory. I lay them out here so the reader can hold them in mind. In the thesis that follows I will not be explicitly tracing out these outer arcs I have just described. We will be following instead a narrative arc, one that is more reflective and closer to my inner experiences and

processes of decision-making along the way.

I think to my viva just ten days before. There my examiners and I discussed at some length the form of my PhD and the creative tension there is between saying something subtly on the one hand, and being direct and overt on the other. The thesis that follows falls on the indirect side of that tension. It is understated. It is a reflection on the process and experience of embedding myself in a field and working to bring value there and for the field action research and theory more generally. But as it is a reflection it will not thrust the outer arcs of my work at you. These outer arcs in the field of local government, in my research project Lowcarbonworks, in the wider community of action research practitioners and ultimately in the wider communities of sustainability practitioners and sociotechnical researchers were very direct. They were overt. And they had an impact. And I will relate these to you. But I will tell you about them via my inner narrative arc. I will tell you how they terrified me, how I went forward and what choices I made. And in the folds of this narrative arc you will see many things that are tacit and unspoken. You will see some of the tensions there are with bringing the whole of oneself into a field and trying to do some work there. The result is something of a field-manual. It is written in a way that is intended to reach out to other practitioners.

Why do I describe it in this way? Why not just give account of it in a straightforward way? Part of my thesis is that at the heart of learning lies a plurality of narrative and voice. I simply cannot make this claim in a singular and direct way. Even by summarising on the previous page my methodological and theoretical contribution I feel uncomfortable for what such a summary might falsely imply. Yes of course this thesis is about this contribution but beware if this seems to be all it is about. If rich learning is to occur at all levels in the system – and here now I include other action researchers or practitioners who may wish to learn from my thesis – then my writing must be plural, engaging and multiply voiced. In this way my thesis is itself another step in expanding scope – a practice that again I will argue is vital if action research is to reach beyond the particularity of its own practice and scale up to make a difference in the world. And another part of my thesis claims that what is an essential facet of innovation and learning is the well-timed, unattached, different move. So in the service of an increased scope, reach, and repercussion I offer the form of this thesis as a departure. It is one of many different moves I have tried to make with my work these past few years. Such moves I

make faithfully, hopefully even. I can't fully know their impact at the time. But I do know their intention is to contribute another path, another way, another story.

So my thesis is written in a way that is consistent with my arguments and with the learning history method I am describing. It is multi-layered, and narratively oriented. Using vignettes, reflective passages and digital media as well as written artefacts, the storyline of a journey is layered on the starting desire to accelerate learning about carbon reduction in the field of local government. You are invited as reader to participate with me in that journey. At the end I will refuse to come to a single point or to create a happy ending. There are you see many points: some spoken, some tacit. Recently I have likened what I have done in this thesis to the work of the pointillist painters who through the laborious creation of tiny dots of paint created an image when viewed at the right distance. My favourite pointillist painting is "An afternoon in the park" by the 19th century French painter Georges-Pierre Seurat. I saw a painting of his once in Munich and stood for ages moving back and forth looking at the dots and then stepping out until the dots blurred and an image appeared.



Figure 1 Un dimanche après-midi à l'Île de la Grande Jatte by Georges-Pierre Seurat

The detail like that in the man's hat on the right hand side was full of tiny, detailed brushstrokes. I wondered was the painter an obsessive languishing in detail, or was he a master? Perhaps he was both? In the writing that follows I will lead you along the narrative inner arc of my research that at times goes into the detailed practice of my research in the way Seurat painted that hat. Brush stroke by brush stroke. You will see the detailed practice and thought that made up some of the outer arcs. And in these strokes you will see different things: my own idiosyncrasies perhaps at times, or a richer texturing of what I am saying in others. And, in some of the vignettes, I hope you might see yourself: your own stories, hopes and fears. With each chapter there is a form to step back from and see. A picture of sorts. And at the end of the thesis there will be shapes. Then again we will step back and look at it all. But if this form has worked then people will see different things depending on where they stand. So if you are ready. Then let's begin.

1. Beginnings

Setting Out

But certainly, for us who understand life, figures are a matter of indifference. I should have liked to begin this story in the fashion of the fairy tales. I should have liked to say: “Once upon a time there was little prince who lived on a planet that was scarcely any bigger than himself and who had need of a friend”

“The Little Prince”, by Antoine de Saint-Exupery¹

I would like to be able to start this PhD in the fashion of fairy tales. I would like to introduce myself to you as a prince living once upon a time on a planet scarcely less fragile than myself. I would like to ask who needs a friend? But I cannot begin this way. Such a start might bear false hopes of a neat tale about to unfold toward a princely conclusion. Sadly this is no such tale - at times it is not a tale at all. It is a messy, complex story about trying to tell messy and complex stories in an engaging and useful way. And figures and fact are not a matter of indifference, as we shall see. But fairy tales start with ‘once upon a time’ to indicate to the listener or reader that it is time to settle and prepare for what is to come. So I set out in this way, to ask you to prepare because though this is not a story it shares some of a story’s spirit. And though this is a PhD dissertation, in places it might not look like one.

The Storyline

From September 2006 until March 2009 I worked closely with seven local government organisations in the UK and engaged with several others. The purpose of this was to explore how learning from breakthrough carbon reduction projects might be drawn out in a way that would not only be of value to those involved but that also would inspire and evoke change initiatives elsewhere. The approach I took was based on an action research method called “learning history”. In the course of the detailed practice of my

¹ **Acknowledgement:** my daughter Isabel (9) casually read this aloud to me on the way to swimming classes yesterday (June 22nd, 2008). I was only half listening. But when she read it I asked her to repeat it 3 times and smiled. This would be the start. Thank you Isabel.

research I developed a new version of it that I called “learning history in an open system”. This was a version that paid particular attention to creating a connection with the everyday mythic in our modern accounts of change. The learning histories that were created I called tales of vision, chance and determination though they included plenty of hard technological facts as well. These histories lie at the heart of the research and my work with them contributes a complementary view to current case studies and theoretical models of change and technological transition that are part of the global discourse on climate change. This then is a theoretical and a practical perspective, on the experience of riding the ongoing, unknowable transition which society finds itself navigating today.

In this opening chapter the process of arriving at the above storyline is described now. It starts with the context, both global and personal of the research.

The Context

At the start of the millennium the debate about climate change was shifting. Arguments over whether it was occurring at all, whether it was manmade and whether it would have devastating effects started to dwindle. The words ‘scientific consensus’ started to be whispered first and then pronounced more clearly. The UK government set a target of a 60% cut in carbon emissions on 1990 levels by 2050. It seemed an ambitious target at the time. As scientific reports have become ever starker (ACIA 2005; IPCC 2007), there have been recent calls to increase this target to between 80% and 90% in order to avoid a temperature increase of 2°C or above (Bows, Mander et al. 2006). Whatever the exact figures, the message is unequivocal: a rapid decarbonisation of our society needs to occur.

However decarbonisation is not occurring in step with the increased awareness and understanding of the problem. Technologies that can reduce carbon are available, yet they are not being as widely used as they could be. In 2006 the Lowcarbonworks project was set up to better understand this anomaly and, through action research, in some way to address it. Lowcarbonworks was a public funded 3-year research program that brought together action researchers from the Centre for Action Research in Professional Practice (CARPP) at Bath with economists from Manchester University and partners from industry. The project rested on the assumption that the barriers to carbon reduction

cannot be viewed as purely technological; rather they result instead from a combination of sociological, organisational and psychological factors set within the context of objective realities that include economics, policy, legal frameworks and technology itself.

Action research is well placed both ideologically and practically to engage with big issues like climate change. It is an orientation of research that concentrates on issues of practical significance within a wider aspiration to contribute to both the well-being of humankind and '*the wider ecology of the planet of which we are an intrinsic part*' (Reason and Bradbury 2008b p.4). However action research that grapples directly with problems such as climate change is less prevalent in the literature than one might expect. The recent 2nd handbook of action research brings together several perspectives on action research. There the emphasis can be seen to be more on the development of new processes, practices and knowledge that challenge and re-vision the world as we know it today. However with growing concerns about the state of our world, the action research community has recently challenged itself to engage more directly with the '*big issues of our time*' of which climate change is one (Reason and Bradbury 2008a p. 695). The Lowcarbonworks project was set up in 2006 in part as a response to that challenge.

In 2006 I was just completing my MSc in Responsibility and Business practice at the University of Bath. The course had marked a significant turning point in my personal history. I had spent my adult life developing a career as a technologist whilst sensing all the while something was missing. I had grown up, the fifth of a middle-class family of six children in rural Ireland and at the age of eleven had gone to a convent boarding school. I had loved sports and mathematics when I was a child. I was a tomboy. At university, I took the practical option of engineering though my heart was with mathematics. In 1988 I graduated with an MSc in Microelectronics and was harbouring an unfulfilled interest in spirituality and philosophy. I emigrated immediately and lived in the Netherlands, France and Germany for eight years learning languages and soaking up European culture before moving to the UK in the mid-90s where I met my husband Andy and started a serious career in microprocessor design. This took me to Silicon Valley in the US for a year and into a very rewarding spell in design and cross-cultural project management. In 1999 I had my first child, Isabel. I continued working and in 2001 had my second child Alex. At work I was promoted further up the management chain after each maternity leave, but in 2002 the company I was in needed to downsize and as manager I had to

make most of the team I had carefully built up redundant. I found this traumatic. The work increasingly lost meaning for me from this point. In 2004 I came to Bath to take the MSc and by 2006 my eyes had been keenly and sometimes painfully opened to the 'big issues' of our time of which climate change was one. I knew by then that for my work to have meaning, I had to stay engaged with these issues.

So when a position for doctoral research came up on Lowcarbonworks I was interested. The project offered an opportunity, as I saw it, of doing action research at the boundary between hard technology and the social world. And it was in service to the bigger issue of climate change. It offered the possibility to integrate my eclectic mix of interests and skills as a technologist turned action researcher with my more emotionally based impulse to do something – anything –that might help our fragile planet. I signed up for the PhD studentship that was part of the Lowcarbonworks project and within that context carved out the inquiry that is the subject of this thesis.

Arriving at the Start

In this section I will present a potted history of the early inquiry process that resulted. This description, that refers mainly to the first year of the research, will lead then to a starting statement in the next section of what the research is about and an overview of its main elements that were deepened over the subsequent 18 months. The purpose here is to help the reader place what comes next as well as start to get a feel for the chronology of the inquiry. It will necessarily be forward referencing into various sections deeper in the thesis. In laying out the writing I have been mindful that a reader should at most be asked just once or twice to place his or her thumb in one place and leaf to another. In this section particularly I seek to run it before you as a preview or, to use a culinary metaphor, an appetiser to be enjoyed without thumbs.

Starting with the wide remit of the project goals my starting questions were regarding the shape of my research within that. What would my research questions be? How would they be bounded? How might I arrive at them? The process of moving forward from this starting point was complex. I can see now that it was a parallel movement into theory, practice and inquiry.

Theory

The project brief had set out a desire to explore the social, organisational and psychological factors (and we now often add economic and political factors to that) that stood in the way of low or zero carbon technologies being adopted. I started to look at various literatures that might be helpful. Organisational change theory might often be set against a goal of achieving an economically successful company for example, but surely some of its theories might translate to some of the questions we sought to address even if returned shareholder value was not our goal? The broad area of science and technology studies included several streams that looked at the interaction between technology and the societal context of which it was a part. There were streams too that offered retrospective analyses of how previous sociotechnological shifts had taken place. More will be said of these theories later. Here I want to give a sense that a theoretical canvas was being painted that helped me formulate and deepen questions about change, society's relationship with technology and the manner in which sociotechnical transformation takes place.

Practice

This was an action research PhD however. I was not going to derive its basis solely in the library and I embraced and indeed orchestrated some encounters in the hope that these too might play a part in guiding me forward. Project meetings, coffee-time conversations, formal lectures, seminars – these and other experiences of the time created a hum of thoughts and experiences that sometimes developed and other times fizzled. In conversation with my supervisor, Peter, we explored how we might align my own purposes and interests with those of the project and what we called 'the wider agenda'. These early conversations weren't so much about what exactly I'd do, but more about finding a few principles to tether my inquiry so that it would have the freedom to unfold and deepen. From early on I articulated a desire to bring in some content to the project, possibly some cases studies, that would be illuminate the main project themes. And a rough framework of naturalistic inquiry (Lincoln and Guba 1986) as a means of going forward started to take shape.

Many different encounters then helped my thinking as to what these cases should be

and what would be the basis for gathering them. In a project meeting while discussing a low carbon technology called ‘aircycle’² I became struck not by the usual question of why this emerging technology was not being used to save carbon, but rather why, in certain unusual cases such as in German trains, it was. The theories of organisational change I was reading were helping to develop a notion that though ‘business-as-usual’ as a response to climate change was lamentable, the nature of organisational routines and human patterns of decision making meant it was a response to be expected. Questions quickly formed around seeing new technology related carbon reduction as an anomalous breakthrough to be celebrated. What led to such anomalies occurring? How might we learn from them? What existing approaches are there for learning from them? Are these working? And where should I locate the study? After a process of gathering possible examples of breakthroughs across the public and private sector I honed in on local government where my provisional research had revealed a series of innovative projects that were worthy of study. In particular I had kept hearing about an iconic project in the London Borough of Woking where, using different low carbon technologies and a local energy network, the local authority had slashed their carbon emissions.

Another meeting led me in the direction of the approach to take. In a semi-formal lunch meeting a colleague and I met with a corporate social responsibility director (MB) to explore a potential university collaboration. Toward the end of our conversation I had noticed a marked shift in tone that interested me. MB was describing to us, in a matter of fact fashion, how x% of his delivery fleet had been converted to biofuel. Interested, I probed a bit more about what was behind this switch. With that he had suddenly sat back, and with a glint in his eye and a glance at his watch he had said: *“let me tell you how things really happen”*. The mood changed palpably as he went on to describe phonecalls, scribbles on envelopes, gentle coercion and, finally, victory. His eyes were alight as he told this rehearsed tale with humour and familiarity. I’d heard many stories like it before. But here I was primed by the search for some ‘angle’ to take with the appreciative stories I was seeking. So I really noticed the shift in mood and imagery when we went from the official to the behind the scenes story. I noticed too my easy enjoyment of it and his readiness to tell. With the cases in my study I wondered, how

² A technology that uses air at different pressures to achieve efficient heating and cooling across a wide range of temperatures.

might I start to elucidate the 'real' stories like this? Surely these would bring alive the experiences of those involved in an engaging way?

Another chance contact and conversation gave me the chance to find out. Just six months after I started my research, I visited a local government office in the London Borough of Merton ostensibly to find out more about Woking. There I met a man who himself had played a key part in the success of an unusual and groundbreaking piece of low carbon planning policy. What was to be an exploratory interview turned out to be pivotal for the research and it provided me with my first case. With what I knew to be an excellent interview on tape, I now had the question: what approach will keep this account intact and do it justice? After some methodological handwringing, which I will describe in detail in my later chapter on method, I settled on an action research approach called learning history.

Learning history might be termed, simplistically, as action research's answer to case study. Researchers in the US have developed it with a specific view to enabling learning from experience as opposed to learning from fact and analysis (Kleiner and Roth 1997; Roth and Bradbury 2008). Whereas case study will analyse an event in an objective way, learning history revels in the messy human story of that event. So it charts an event or occurrence of significance from the perspectives and experiences of those who have been involved. Researchers and participants engage together to tell a jointly told tale (Van Maanen 1998) and through the reflective process there is potential for learning for those involved and as well as for others who might relate to the experiences that are described.

Inquiry

The strands of theory and practice are described above as though they were separate. The encounters sound perhaps haphazard; the choice of naming just one or two of them here is ad-hoc and to be taken as representative rather than comprehensive. My journal in which I regularly recorded thoughts, reflections and stories relating to my work and to my life in general describes several other such encounters. And I have described an evolution of questions without really explaining what guided this progression. Here I can say that all this was knitted together by various processes of personal inquiry that were

helping to guide my actions and decisions. Some of this process will be described in later sections and the reader will see that this was itself neither a fixed nor a perfect process, but it was always there and constantly under review. Reflection, by myself or in conversation with Peter and others, played a key role in helping me to making sense of what was happening. Theoretical links guided the areas of interest whilst experience brought some of these to life and reflecting on that helped me to decide what was significant. Constant telling and re-telling about my research, and then listening back or reflecting on it, helped me start to shape a 'story' of my research. By the end of the first year then I had an early development of ideas, strands of inquiry as well as preliminary interview material with which to work.

Overview of the Research

Starting statement – the research focus

From that starting interview and early development of ideas, I was able to launch forward into the inquiry that is at the centre of this work. This is an exploration and development of the learning history approach as a means to:

- Accelerate learning inside and between organisations that are working within the same institutional framework.
- Contribute overall to an understanding of how to respond to the challenge of climate change within and beyond the institutional setting in which the study is located.

And more generally to:

- Increase understanding of the processes for innovation (in this case for carbon reduction)

In the next two subsections I propose two different ways of looking at the research. The purpose of this is to draw two different maps of the research that will be discussed in this thesis. The first is a map based on a metaphor; the second is a chronological map.

Together they delineate the territory of the inquiry. When, as inevitably I must, the linear map of the thesis is laid out, it is hoped the reader will be primed against any sense that this inquiry simply unfolded as one thing after another.

Map 1: Research as garden

Tasked to describe my research in a workshop recently I found myself sketching it all out according to a gardening metaphor. With a warning that it is not to be taken too literally, I have decided to use this metaphor to sketch out the different areas of inquiry and to illustrate, using a handwritten font, the kinds of questions that concerned me.

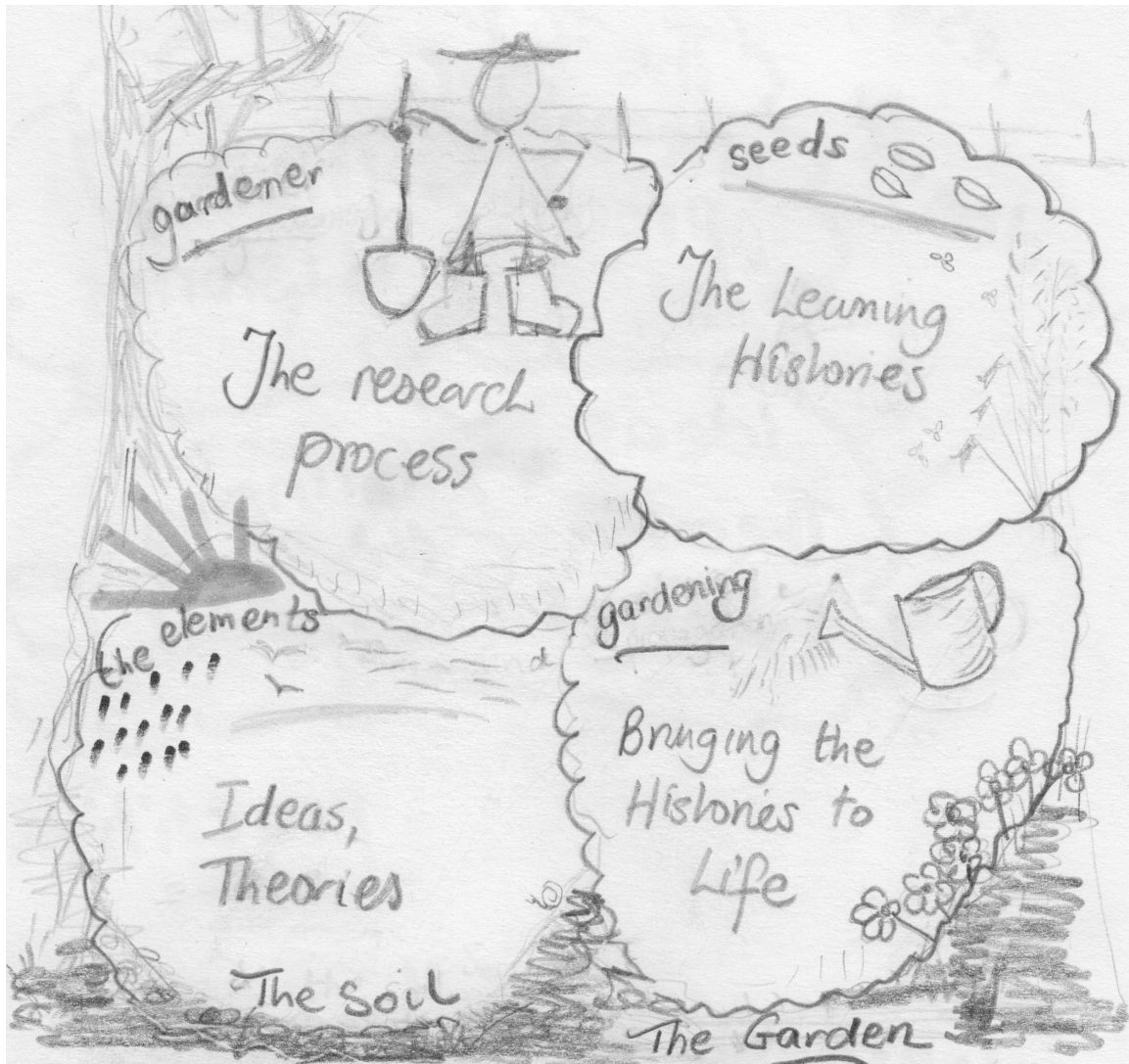


Figure 2: A sketch of my research - using a loose gardening metaphor

The Seeds

The research has involved the creation of a set of learning histories that describe five very different innovative projects in local authorities. These learning histories are artefacts. They are small booklets that, in a particular way, describe something that happened from the perspective of one or two people close to the project. Those perspectives are, like DNA is codified in a seed, written into the histories. I liken the histories to seeds because they are distinct and they contain the potential to flourish in different ways and under different conditions.

Inquiries relating to the set of learning histories have been relating to the processes of codification, for example:

How might I craft this history in a way that has the potential for it to flourish in all kinds of settings?

How might I do justice to the stories that have been told and the individuals who have told them?

And the integrity of the histories that result:

How do I avoid collusion with just one prevailing narrative of a project?

How do I do justice to the stories that have not been told?

Gardening

Early in the research I grappled with how to distinguish the process of learning history from the artefacts created by that process. The name 'learning history' suggests it as a fixed object – a written or oral record of something. In its reduced form that is indeed what it is: a written document. However it is also much more than that – it is a process of learning involving the creation of an object and the subsequent work with it. This was a potential I wanted to explore in some detail. So likening the process of learning history research to the activity of gardening I paid particular attention to the question:

How might I enliven the learning histories – in different places, with different audiences and at different times?

The metaphor is one of germinating the seeds, possibly incubating them and exploring how they might be sown in different places where their progress and growth is then evaluated. And it maps onto inquiry questions of scope as well as validity:

What kind of value is to be found in learning histories and for whom?

Where and how might that value be sought – for different people, in different places with different agendas?

The Gardener

The research process has involved a series of decisions and these are highly relevant to the exploration of methodology and development of ideas being set out in this thesis. On the other hand this series of decisions make up a story – one of hapless twists, turns and moments of insight pitched against days of mundane graft and effort. Where insights

have sometimes flourished they have at other times withered away. And teeth-gritting brave efforts have been rewarded sometimes but by no means always.

So I liken my role in the research process to that of the gardener who tends the particular garden she is in and works as best she can. She decides what seeds to gather and where to sow them. She waters them and tends to them in certain ways and makes decisions on how to respond to the elements. The inquiry questions relating to the gardener relate to decision-making and processes of inquiry:

How do I make decisions?

How do I develop inquiry questions - how do they lead to action?

But the warm sun on her back may wither her plants as quickly as it might make her smile. And the rain that merges with tears on her face might nourish the garden. She is human.

How does who I am impact on this research?

When might the human experiences of my research process be helpful?

How might I ensure the quality of my work?

The gardener also looks from time to time at the garden she's in. Sometimes she loves it and sometimes she is quite dispassionately critical of it. But this is where she is and it is helpful sometimes to look at the earth on which she stands.

On what kind of ground is this research located? What are its strengths, its weaknesses? How do I see that ground?

The Elements

The sun shines light on growing seeds, the wind helps blow them and the rain helps nourish them. The elements give life to the garden and without them it would not grow. Likewise theories and ideas give life to an inquiry. Just as the elements determine the growth and nature of a garden, so have theories and ideas shaped what I have done.

What does theory say about organisational change processes and innovation for carbon reduction?

What does theory say about learning history methodology?

The gardener needs to attend to the elements and develop a sense of discernment when it comes to noticing and responding to them. Though she may work on come rain, hail or shine, the shape of the garden will reflect how she has attended to the elements. In the course of the inquiry certain ideas have recurred at a point of intersection between theoretical ideas and the practice of the research for example:

Theories place technology as part of seamless social web of human interaction? How am I experiencing that in practice?

Other ideas have developed where my past interests and experiences have met my research evidence and the literature: For example:

Taking a (post)feminist stance, how might I build a non-heroic picture of innovation for carbon reduction?

This question alludes to postfeminist strands in my MSc that are now being re-set in a new inquiry. And as this write-up will to show, other ideas have evolved as the research has proceeded and these ideas have driven the direction of some of my theorising.

The Soil

The gardener needs to work with the soil of the garden. She needs to familiarise herself with it and its qualities. Is it acidic, damp, sandy? What are its qualities and what will that mean for the work she hopes to do. She has chosen this site for the garden, but can only get to know it properly as she gets to work. Similarly I have had to get to know something of the local government space in which I located the research.

What is the nature of the local authority institutional field?

How might I adjust the research process to work best with it?

I am aware too that the garden fence does not bound the soil. There are different fields in which some of the seeds from this garden might flourish.

In what different settings might this research have influence?

How might the research be designed to cater to these different settings?

The Garden

The overall sight of the garden on a particular day a few years after the work has started might be likened to some of the outcomes and findings of the research presented in this

thesis. And in much the same way as a garden can look different at different times, the 'findings' have a property of contingency about them. They are presented 'as they look now' with the caution that they may look different on other days and the hope that in time they might mature and evolve. Also they indicate that subset of the research outcomes that can be claimed or proposed as having been found out. Action research is a participative process that seeks repercussion via a network of participants known and unknown. As such, findings returned by action research are often confined to the participative processes such as they can be 'found out' or generalised for further use. Here the learning history approach, with its combination of narrative and analysis, does offer the potential to theorise around the content of what is being studied as well as around the methodology.

What common themes come out of this research regarding innovation for carbon reduction in local authorities?

How might that be generalised?

I might say then that the findings relate to the overall sight of the garden in summer but won't include the cross-pollinating seeds carried by the winds, the cuttings shared with neighbouring gardeners or the travellers who might pause to simply enjoy a momentary scent or who, catching sight of the gardener in the course of her toils, have reflected a moment before continuing with the toils of their own. The garden has many purposes, many audiences.

Who is this research for?

And the metaphor sizes the research – this is but one garden of many - and that helps me to assess it objectively. For example a persistent inquiry question has been this:

Just how important is learning history as an action research approach to enable change? How important are these 'things' for starting conversations and processes of change? Are they merely placebos? Or do they truly carry a special meaning that can flourish?

In other words, the gardener opens her fist, looks at the seeds and wonders first if she needed to work so hard at getting these particular seeds and second with what attention they really need to be scattered?

Using the gardening metaphor

A loose gardening metaphor has been offered to help give an early overview of the scope of research described in this thesis. By expanding on the metaphor it has been possible to illustrate the different kinds of inquiry questions that have been important. Some of these questions will be addressed directly and in much more depth as the thesis unfolds, others will be more implicitly discussed. The metaphor puts in place a means to distinguish different facets of the research later on. However I don't intend it to be taken too literally. A light push and it falls down in places. The gardener appearing as the only person, and identified so closely with the researcher conveys the wrong emphasis for example. Or the organisation of theories as an element blowing in rather than the territory on which the research is grown might jar with common views of how academic knowledge is created. However I use the metaphor to start to locate the different layers of the research without stifling it for now. It is setting the scope for the work.

Map 2: Research as chronological flow of action

The second map, shown in Figure 2 below, depicts the research as a chronological flow of action cycles over a period of nearly three years. In reality these action cycles overlapped more than represented here but the diagram conveys well how the emphasis of the inquiry shifted over time in terms of its purpose and its scope. This shifting emphasis was reflected too in how the participants in the study changed over time.

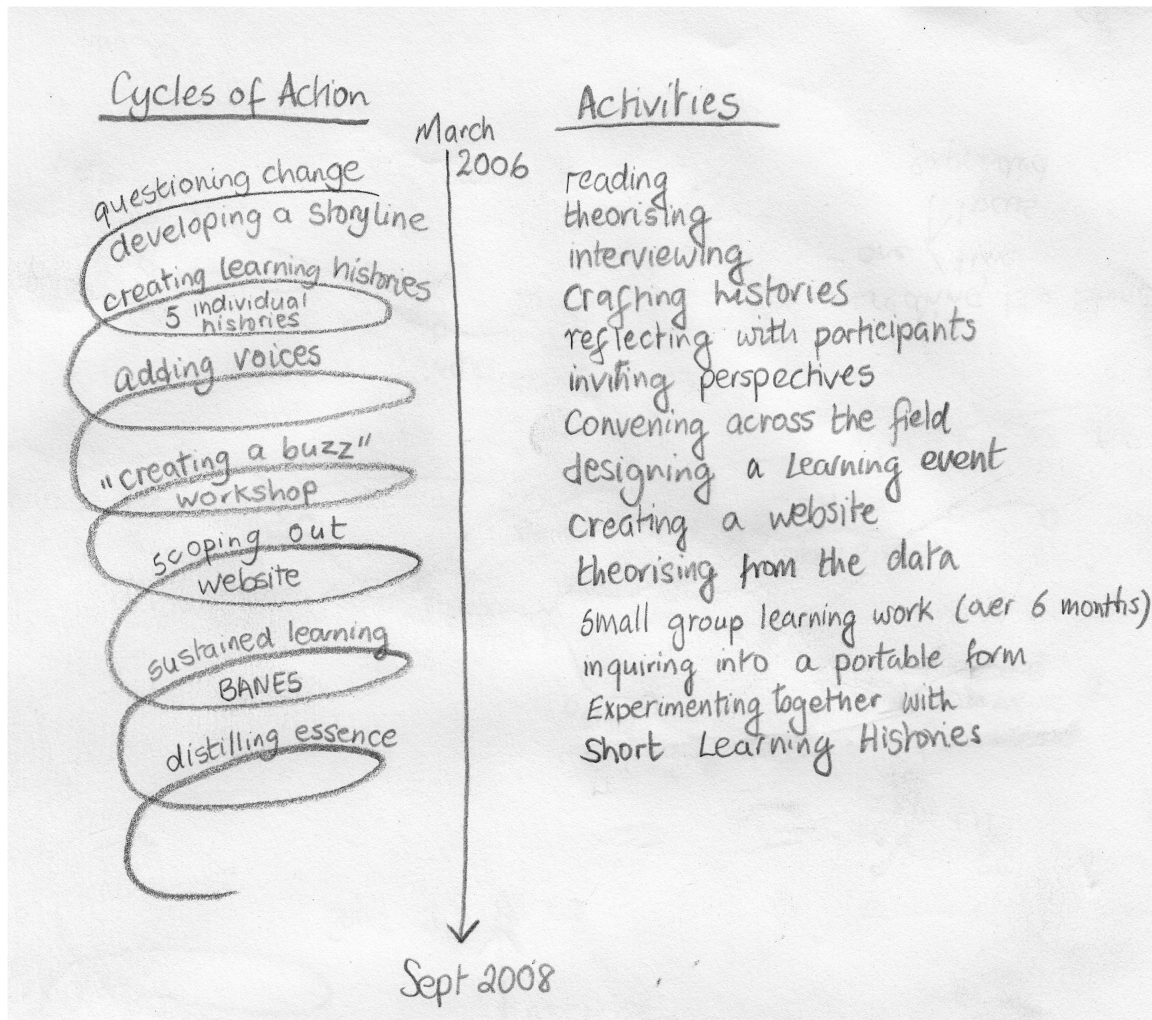


Figure 3 The research as a chronological flow of action

The first cycle of action involved my exploration of various theories from which I mounted an argument for conducting learning history at the institutional level. Over time I developed a 'storyline' for the learning history work I would do. I would chart "the story of how innovation for carbon reduction is occurring in the field of local government". The

next action cycle involved the crafting of a set of learning histories, drawn from across that field. By field I mean the institutional field of local government and connected organisations. I draw on Di Maggio and Powell's definition of an organisational field:

By organisational field, we mean those organisations that, in the **aggregate**, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organisations that produce similar services or products

(DiMaggio and Powell 1983 p. 186)

The next action cycle, "adding voices", involved the process of reflecting with original participants on what had been written as well as starting to gradually open the histories up for participation. This started by inviting in some of the voices of others who were involved in some way in what had been written.

This scope then started to widen out further to the institutional level in the next action cycle where quite deliberately I started to 'create a buzz' around the histories by inviting those from across the field and beyond to engage with them. The central event in this cycle was a 'learning history workshop' that took place in February 2008. This step was oriented particularly at the previously stated purpose of accelerating an overall response to climate change by increasing the potential for learning between organisations as well as within them. From this 'buzz' around the five individual histories came new stories, new voices and new perspectives from across the field. These enriched the original storyline of the research and, in the next action cycle, these richer, multi-voiced perspectives were knitted together to create a joint learning history, not as a further document but as a live interactive website³. The joint learning history then was itself one site of experimentation with broadening the scope of the work out into the wider system. The participants were now further away –sitting in larger audiences or linking to the work via a website. This cycle of action then has involved an exploration of ways to promulgate the work outwards into the system of others with consequences that cannot be known.

³ http://academicmum.typepad.com/lcw_learning_history_inno/

A further site of experimentation is shown in the next action cycle: “sustained learning”. This was at my local council of Bath and NE Somerset (B&NES) who were just beginning to get to grips with the climate change agenda. Together we were interested to explore how the learning histories might help them to build capacity and overall a culture of innovation. Over a period of six months a sustained inquiry took place. This also provided a site where the emerging thematic findings from the research could be tested.

Finally, as the experimentation in the institutional field was finishing, “a buzz” started to develop in our own research community about learning history. Inquiries into form, portability and development of the approach started to blossom and these questions began to find homes in new research projects as well as on Lowcarbonworks. From these questions came experimentation that is ongoing. One such experiment – where a learning history exercise over just three days was devised and run at an action research conference – helped us to collaboratively explore what is the ‘essence of a learning history’ against a backdrop of fresh (and for some painful!) experience.

The chronological action map gives a sense of what was done and relates these actions to the research focus that was described in the starting statement. However it doesn’t explain why the action moved in this way. This will unfold as the dissertation draws from across these action cycles to illustrate a set of inquiries that deepened and developed over time. Having a chronological map will help the reader place the illustrations in time. And the map is also the start of the proposal of what is original here. A learning history project is shown as a continual process of engagement and widening scope within an open system and so the map already distinguishes this work from other interpretations of Learning history in a number of ways.

Ending statement – the broader thesis

The statement at the start of this section set out the research as an exploration and development of the learning history approach as a means to accelerate learning between organisations as to how to innovate to reduce carbon at the institutional level of local government. This is the narrow focus of the study. The use of the gardening metaphor to span the research has highlighted many questions that lie outside that focus

that have been addressed in the course of that study. This dissertation is predominantly a learning journey that has meaning at different levels. This does not preclude there being a central thesis but merely cautions that the idea of a central thesis is at odds with the thesis itself. To explain: I will argue that innovating - in this case in some way to reduce carbon – is an evolutionary process that paradoxically we cannot afford to let just happen. I will propose that new ways of learning between sites of innovation across a field are necessary to accelerate learning in a meaningful way. I will suggest that my version of learning history in an open system, which draws particularly on the narrative lineage of learning history and puts it together with participative action research processes offer one way of doing this. I will pose my work as itself a process of innovation that echoes with the substantive innovative examples that are featured. By allowing these to intertwine and relating them too to current theories of sociotechnical change I will comment more generally on processes of innovation. This will lead to some insights – part theoretical, part practical - into what ‘intervention’ or ‘action’ in an evolutionary process looks, feels and seems like. I challenge some of the archetypical myths and ideas about heroism and reach for a more postheroic interpretation of this ‘action’. So my thesis is drawn from the process of putting a method, a problem and a context together. These are not being enclosed to find a solution. Rather I am suggesting that it is the process of putting them together that is itself innovative and informative at a fundamental level.

Main Contributions

There are two main contributions. The first contribution is on method. A large part of this thesis, (from Chapters 4 to 9), is dedicated to the working in some detail of a learning history method that is geared at enabling learning at the inter-organisational level. From this working – which goes into the nitty-gritty practice of learning history - comes a development of existing theory, a new proposal of method and insights about the practice of it in a wider field. The resultant ‘learning history in an open-system’ is proposed as an ongoing practice of celebration, inspiration and amplification. Also through the discussion I make claims as to what makes up the essence of learning history and how its connection to the mythic orientation is difficult but essential if it is to work as a vehicle for learning and developing new understandings. This research has also something to say more generally to the field of action research. The nature of quality in action research is discussed from the point of view of guiding practice rather than assessing it. Criteria are developed that are process *and* outcome oriented and these are shown in action through the thesis. The inclusion of modernism in action research is discussed throughout and particularly in relation to finding a place for technology that is neither exalted nor excluded altogether. I conclude that it is only through expanding conversations in practice that such a place can be found. Finally this research contributes to the recent debate in the field about how action research might address the challenge of being limited in its scope to individual projects and interventions. With its inter-organisational situation and its deliberate practice of widening participation in this research I claim that the open system learning history proposed here can reach a wider scope though to do so requires a different kind of practice, attention and energy.

A second contribution of the thesis is what it says about processes of technology-related innovation and change in the context of climate change. This is mostly covered in Chapter 3 and in the later Chapters 10 through to 14. Theories of organisational change are found to be wanting in their suggestion of change as being a controllable and purely social process, whereas conceptualisations of innovation are less controlled but tend to be technology-centric. Current government policy reflects this polarisation by concentrating either on user behaviour or on technological innovation where innovation stops at the point of invention. Though current sociotechnical theory goes some way to

address this dichotomy I will suggest that a meta-theory such as this, however expanded it might be, can never fully colour in the human experiences of change the way that stories can. The learning history method presented here proposes an analytical lens that generalises about processes of innovation whilst retaining the particularity of the experience. The resultant analysis in this research suggests that, far from being strategically, politically or technologically driven, innovative projects erupt dynamically when contextual factors meet capable coalitions that exhibit certain complex qualities, that include: actors' attitudes to risk, the flow of knowledge and trust and the ability to build capacity against shifting agendas. Hence the suggestion is that individuals, groups and even our society is part of an evolutionary process that is undergoing transition. Though where this transition will lead is inherently unknowable, this thesis explores through its tales of vision, chance and determination what meaningful action within such an evolutionary process might look and feel like from a personal, theoretical and practical point of view.

Aside from these contributions I'd claim too there is a contribution in the way I tell this story. The writing is trying to catch something of the mood of my learning journey and to reflect in its form the content that is being discussed. If this works then there will be unexpected contributions that are multi-layered and personal to each individual reader. The next section sets out the presentational form that I have used to support this aspiration.

The presentational form

In choosing the presentational form of this dissertation I faced various challenges of balance. How might I show you some of what the research was like – some of the messy ‘real story’ of it – whilst also telling you something more measured that links motives, action and findings together in some, inevitably rationalised but meaningful way? There is the story of what I have done and what happened and then there is the meaning that goes with it. And how might I layer the sense I make now with the sense I made earlier? Do I privilege the writer now from the field researcher of a year ago? Surely not. So there are choices of time and representation.

Questions of time: where am I now?

I have decided to place myself quite firmly, here, now, in late 2008 reflecting on what has happened while I write. I will take forays across the timeline into some of the earlier action showing it, or sometimes telling it like it was at the time. But I’ll return to the point where I am now trying to derive a new layer of understanding from across the several cycles of action. To this end the writing will be organised as a series of explorations of themes that cut across time and action. In this way I will be able to chart these thematic inquiries, writing into them and searching for a deeper understanding as I go.

And then there is you: the reader. What is your involvement? Some readers I know and can imagine and others I don’t. Some will read to assess this work whilst others will read perhaps out of interest or duty or love. All of you will read for your own reasons and from the unique position of your own experience at that moment. Honouring the unique position of the reader has been an important aspect of the learning history work. I will describe later how participating readers were invited to reflect and derive their own meanings in relation to the history rather than being expected to accept a certain received account. So it is in this thesis. The French literary scholar Barthes’ distinction of “a writerly text” from “a readerly text” is relevant here (Barthes 2001). Whereas the “readerly text” offers fixed meanings to be received by the passive reader, the “writerly text” offers ambiguity and mess that is open to multiple interpretations involving the reader in an active process of co-production. This dissertation is offered as a “writerly text” where:

Unlike the readerly text, the writerly text is less predictable. It does not attempt to control the reader; he or she must make his or her own connection between images, events and settings that are presented by the author.

(Sumara and Luce-Kapler 1993 p. 390)

Can a thesis be a 'writerly' text? My intention is that it has at least some of that quality.

Questions of representation

As may be already apparent, questions of presentational form have been important in this work. So, at the start of writing-up I paused a long time to think over what form I wanted it to take. To help me, my second supervisor Geoff Mead asked me to think what qualities I wanted it to have. I thought some more and could identify two qualities that were important to me in the way I presented the writing: elegance and congruence. These qualities are important for my practice as well as my presentation. I present them here as distinct from, if sometimes overlapping with, the quality criteria I will introduce later for the practice of the research.

Elegance

Elegance is the first quality I aspire to in the writing and in the design of the research. Here I am building not on a theoretical idea but on my personal experiences as a microprocessor designer as I will briefly describe.

Microprocessor designs need to be able to execute commands called instructions. The simplest example is the 'addition' instruction. This requires the processor to take two numbers from locations in memory, add them and put them back into another place in memory. The challenge is that with dozens of instructions and an endless number of things that might be in memory there are an infinite number of things that can happen with any stream of instructions. As a designer, you're creating units that can best fit to all these scenarios but that you can't possibly anticipate all of them. Often as not when you test your first design some unexpected condition is triggered. So you return to it and you might add in some special piece of design to cater for that case. And so it goes on. By

the end, the design can be an incomprehensible rat's nest of adjuncts, caveats and codicils added in throughout the testing process as esoteric conditions trigger and necessitate quick fixes. As a designer gains experience, he or she learns to anticipate better what the design will need to do and can do so with a minimum description that is not effusive.

Elegant design (which is manifested in a coded language) is written in a way that not only anticipates well what might be required of it, but can sometimes handle the unanticipated as well. It does this by striking just the right balance between the general and the particular. Design that is too particular becomes unwieldy and over-descriptive, as it needs to enumerate all the different cases. Design that is too general doesn't have sufficient depth to meet the diverse needs of the different programs it has to run. There is a real art in elegant design from the choices and classifications the designer makes, to the way they present their code. One can tell just by looking at a piece of code if it seems elegant, and, by running tests, one can test just how elegant it is.

The above analogy connects with my aspiration of producing a text that is not only aesthetically pleasing, but balanced between the general and the particular, is capable of conveying something without saying it explicitly and has a coherence that emerges rather than is forced by logic. The aesthetic quality of elegance connotes clean lines, minimalism and clarity of tone and is one that will be in tension with the 'messy' learning history quality I seek in the service of the second quality of presentation which is congruence.

Congruence of practice

Congruence has been important to me in my practice as an action researcher for some years now. The idea of congruence fits with one of the tenets of action science as put forth by Argyris and Schon. Their theory of action suggests learning comes about when we reflect on the differences between our 'espoused theory' and our 'theory-in-use' (Argyris and Schon 1976). So if I espouse ideas about innovation for example, I will learn more about the ideas if I observe how I am actually embodying these ideas in practice. If not, then I might ask if I should adjust my 'espoused theory' or my 'theory-in-use' or, indeed whether this incongruence matters really. So this quality of congruence is sought gently and with tolerance for it not being completely attained.

I was not always so forgiving. During my MSc I explored the 'theory-in-use' of my personal action inquiry process as well as that of a number of action research groups of which I was a part. Inevitably I found our practices to be incongruent with the theory of action inquiry we were espousing. At first I judged this as a failure either of practice or of theory. Over time though my attitude gradually shifted. I started to reconceive action inquiry not as a dogma to be transgressed but as a constant process of learning, an iterative cycle of *"incubating, inventing and reinventing"*.

When gaps occur between theory and practice, as inevitably they must, I have learnt that the answer must not be to scream indignantly, but rather to question the theory, the practice and indeed whether, in this case, the difference between them really matters.

(Gearty 2006 p.38)

Resulting from this inquiry was a picture of the theory-in-use of my personal inquiry processes and as I entered into a new cycle of inquiry on the PhD this became the basis of my espoused theory of personal inquiry. As the new work unfolded, I could ask once again how congruent my practice was with this claimed theory of personal inquiry.

Congruence of presentation

This quality of congruence is of particular importance in the area of presentation. Action research theory sets out the extended epistemology of multiple ways of knowing the world (Heron and Reason 2001). This extended epistemology is defined as starting with (1) the experiential knowing that comes through encounter with the world (2) The presentational knowing that is an expression of our multiple ways of knowing and so draws on multiple representational forms that such as dance, story or imagery (3) the propositional knowing that occurs through abstract thought, the development of concepts and ideas that can include scientific knowledge and finally (4) the practical knowing that arises from doing and learning in practice. These are not independent of each other. For example experiential knowing is conveyed through presentational knowing which in turn can enable a move to the abstract meanings of propositional knowing that can then inform knowing in practice. Furthermore the argument is put forth convincingly that all these ways of knowing are equally valid with none privileged over the other (Reason and Bradbury 2006 p. xxv). In action research, the practical learning and change that is left residing with participants in the field is argued to be as important as theoretical findings (Toulmin and Gustavsen 1996). Though this is intuitively a welcome and sensible argument the equality of the extended epistemology is in fact notoriously difficult to enact in an academic institution that is founded on the principle of privilege of propositional knowledge. Institutional processes, artefacts and systems of reward all act to reinforce this principle. Enacting the extended epistemology is then the source of much incongruence and rightful self-challenge within the action research community who constantly catch themselves out and self-recriminate. Why is this paper on action research so densely written? Why can't I submit my MSc thesis as a piece of drumming? Why have we just sat in an action research meeting and talked conceptually the whole way through without once seeking recourse in other ways of knowing? These are all questions I have asked or heard others ask and I understand them now not as a critique but as a nod towards more generative questions. It is particularly on the subject of presentation that practitioners have been pushing toward more congruent descriptions of their work. Judi Marshall for example advocates finding form in the writing where form, content and thematic contribution are analogically congruent

(Marshall 2008 p.682).

And other pioneers at CARPP have submitted doctoral work that, by its very presentation, is an epistemological statement in its own right and one that is acceptable to the academy (Seely 2007; Morton 2008).

It is following in the tracks of these and other colleagues' work that I define the congruence I am seeking in my writing here. Put simply I hope with the writing to do what I claim to be important. This thesis is about the development of a learning history approach. It is also about innovation. Later I will draw out some of the features of learning history as I've worked with it – for example it is realistically messy, it is human, it is located in time, it is plausible and so on. And of innovation I will describe it as a 'different move'. Though this write-up is not a learning history, I hope it to be congruent with some of its principles as described: it will be messy, it will be human, and it will blend analysis and story. And though this write-up is not an innovation, I hope it will in some way be innovative – a 'different move' of sorts. And though this write-up is in fact not my PhD, I hope that the quality of congruence will help paint a fair picture of the work that was done.



Figure 4 Magritte's Pipe: "This is not a pipe"

I conclude this section on congruence noting wryly how I have written in plain language about how I 'want' to be congruent. Perhaps I should start now. With thanks to Geoff for his evocation of the image of Magritte's pipe which catches visually what I've just discussed. Magritte cautions 'this is not a pipe' – it is a picture of one. And I add, it looks pleasingly like a pipe! When I'm finished I'll look at this write-up and say: though this thesis is not a learning history, does it look like one?

Introducing a key for congruence

To work toward this congruence I plan to distinguish different perspectives in the writing of this dissertation in a way that is similar to how I have distinguished the analytical, reflective and narrative voices in the learning histories themselves. These elements will be spread through the dissertation. Narrative blooms will expand into story in places providing another way of presenting what is being discussed. Reflective pauses will change the tone and add a different layer. Dated occurrences will locate the action in time and again expand the discussion to include a messier picture of 'what it was like at the time'. Findings will in places summarise and distil. The use of these elements has been an experiment. I have had to try to balance them and have played around with how to introduce them. Sometimes however they might still interrupt, delay or confuse. Overall they are intended to provide texture. It will be through these textures that I will also introduce myself as participant in the research. In the later chapter on method I will explain that I will be presenting the relevant rather than the whole me in this writing. It will be through the textures that I will present that relevant me.

This key is shown on the next page. Each different perspective has an associated image, a little story to go with it.

Key



A narrative bloom....

This will be a passage described more in storied form. I call it a narrative bloom. It comes directly from the garden of the research. It will be added to bring to life and enrich what is being described.

Choice of image: I wanted to use a bloom to represent the flowery nature of narrative which I expect will contrast the dryer descriptive tone needed for much of the text. I use a picture of a sunflower grown by my son Alex (7). It grew taller than him and stood outside our front door last summer (2007).



A reflective pause....

This will be a passage that introduces an idea or a reflection and is intended as a pause or a break from the main text that is breathable and will be unbroken by interpretation.

Choice of image: When I need space in my head I often look up at the sky. On still summer days balloons fly huffing and puffing over Bath. When they do we all look up and often photograph them. This is one that flew over our house last summer.



Dated occurrence in time

This will be a passage that brings in evidence from the research pretty much unchanged. It may be a taped conversation, field notes or part of a journal entry. It will be dated and located according to when it occurred.

Choice of image: The image I chose is my hand-written moleskine journal. Though I actually write most of my journal online, I write in this when I'm travelling and love the tactile nature of the journal.



Finding or insight from the research

This will be an emerging insight or finding from the research. It may summarise a key learning point or proposed conclusion from a foregoing description.

Choice of image: In France in 2005 my children spent days colouring in mandelas. This is one they did. The mandela is colourful like a flower. But with its symmetry and ordered pattern it is unlike anything natural from a garden. I choose this image to represent findings because they are at a step removed from the garden of the research. Like abstracted flowers.

Laying out the thesis

In this chapter I have introduced the research giving a brief history of how I arrived at the starting statement of what it is addressing. Then, using two different lenses - one metaphorical, the other of chronological action – I have given an overview of the process of the research, its breadth and the kinds of questions it is addressing. From there I summarised a statement of what this thesis is setting out to say. And I have then set out some of the qualities that will guide how I am going to say it. The overall purpose of this chapter has been to build a rich but accessible map of what is to come so that you, the reader, can start to engage quickly without fears of being led into a confusion out of which you may not emerge.

When it came to the final choice of laying out the thesis in a linear fashion I became quite stuck. I suspect I am not the only researcher to have harboured the fear that in the moment of choice, many other appropriate and beautiful ways of describing the work are excluded. I got quite stuck trying to decide how best to structure this report. Gently introducing a flavour of what is to come in this dissertation, I introduce here a small story that came to mind and helped me out of this dilemma.



October 10th, 2007

Buying Sweeties – Choice is not a zero sum game

We're in the village shop. Alex, my 7-year-old son has 50p to spend. We've whittled his choices down to Polo-mints, Maltesers and a pack of Werther's originals. The volunteer behind the counter, Keith, is good-naturedly waiting – there's no pressure. An old man, normally grumpy, is smiling at the adjacent coffee table. "I know I'd have the Werthers", he says. It's the first time I've seen him smile. We're all in the drama. "Look – just get the Polos", says his older sister Isabel testily. She knows what he should do. Alex paws the

Polos as if to take them but then changes his mind at the last minute. The wait continues. It's agonising. Finally I get a moment of clarity..."Look Alex, the thing is, they're all lovely, they're all tasty, whatever you choose will be lovely", he looks at me, and he gets it. He snatches the Maltesers. There's a loud cheer, a breath of collective relief. He reaches up to the counter, proffers his 50p and pays. "There you go young man", say Keith and off we go.

The thesis: signposts

Thinking of this story I realised that there were many good ways to structure the thesis and that what I had to say would come out one way or another. By looking at the two maps I had drawn of the research I could see that the questions from the metaphorical description had interwoven their way through the chronological action cycles. These had coalesced into a number of thematic inquiry streams and it is in this way that I decided to organise the writing which has resulted in a layout of one learning history and 14 chapters (including this one). This section will describe the flow.

Structural flow

You are invited into the dissertation via a **Gateway of Experience** which is the Merton learning history. I would like you to start with a direct experience of learning history, rather than by building logically up to it. So you are presented with the first history that was written - Merton - much as it has been offered to participants – with an invitation to engage and record your reactions. The thesis then unfurls from this illustration with a series of thematic explorations that relate to it. By building on the illustration of the Merton history to draw in the broader questions of the research I hope to be relating also to the your experiences and questions. These thematic sections divide into three parts that loosely connect to the timeline of the research over the 3 years.

Part I The Field of Action and Inquiry sets the context for the research. It marks out the extent of the work and its setting in local government. It presents a working of the theoretical and methodological ideas that underpin the research and it then gets into the practice of it with the learning history workshop and a discussion of the questions of scope and quality in action research.

Part II Reflecting in the Field reflects in some detail on the learning history process being presented here – in terms of method, practice and form. What it is to do this kind of learning history is explored in some detail. This section contributes particularly on questions of responsibility, power and narrative in learning history.

Part III Analysing from the Field marks a move to the more analytical aspect of the research and to the later cycles of research. Here I return to the substantive issues and explore the analytical insights from the research on questions of innovation and change for low carbon. The practical application of this analysis back in the field is discussed. Its implication for theory is developed and the thesis concludes with a reflection on what this means for meaningful action in these unknowable times.

It is best to start with reading the Merton learning history. From here the reader could follow the methodological strand covered largely in parts I and II (Chapter 2,4-9) or the more theoretical strand that discusses more about the change and processes of innovation. This is covered more in part III (Chapter 2,3 and 10-14).

Chapter overviews

Opening

Chapter 1: Beginnings (This Chapter)

Gateway of Experience - The Merton learning history

Part I: The field of inquiry & action

Chapter 2: Bridging into the Field describes the context in which the research is set. It gives an overview of local government in the UK and describes the seven organisations that were sites of inquiry in the research. The remaining learning histories featured in the research are summarised together with a description of the process of gathering them.

Chapter 3: Questions of Theory and Purpose: Underpinning theories of the research are described. Theories of 'change' and 'innovation' are explored in the context of the purposes of the research. The Dutch school of sociotechnical theory is introduced as highly relevant to the discussion.

Chapter 4: Questions of Method: Proposes a development of 'learning history is an open system' as an aide to joined-up, systemic learning at the inter-organisational level. Sets up three key areas of inquiry in the field of action research: scope, modernity and the direction of inquiry.

Chapter 5: Questions of Scope and Form: Describes how scope and broadening participation with the research was sought with the learning history workshop. Discusses the enduring consequences of this and the further inquiries into the essence of learning history form that resulted.

Chapter 6: Questions of Quality: Sets out the quality criteria I have worked to and situates these in relation to the literature. Proposes these are personal, and oriented from practice. Argues the importance of elements of modernity in these.

Part II – Reflecting in the field: story, form and method

Chapter 7: Questions of Participation and Perspective: Explores issues of voice, power and participation in this kind of approach to learning history – leads to a detailed guide to responsible practice for a learning historian.

Chapter 8: Questions of Learning History: Wittgenstein's Ladder or Trojan Horse
Explores the question of just what is the learning history. Proposes it as an enabling device that works by moving participants safely from a familiar modernist world to a less familiar, complex, multi-truthed world where deeper understandings and conversations can occur.

Chapter 9: Questions of Myth and Form: Sets out the importance of the mythic in learning history. Proposes how a mythic quality might be created in learning history and explains why this was difficult but important to me. Discusses the implications this has for the form of the learning history.

Part III - Analysing from the field: theory, innovation and learning

Chapter 10: Bridging from Story to Analysis: A bridging chapter that marks the shift from a methodological, narratively oriented part of the thesis to the more analytical, content-related part.

Chapter 11: Questions about Innovation: Draws on the analysis across the learning histories as to what enabled different breakthrough projects to occur. Presents 6 meta-themes that this research has found to be relevant to the experience of innovating to reduce carbon in local authority. Introduces learning questions to help resituate this theory back in the field.

Chapter 12: Questions about Theory in Practice: Describes one final cycle of inquiry – the small group at B&NES – where learnings and insights from the research generally and from the thematic work specifically were tested back in the field. In this way the scope of the research and its value for practice was being concluded.

Chapter 13: Questions about Theory in Theory: Revisits the sociotechnical theory of Chapter 3 in the light of what has now been discussed. Claims that these theories fall short in that they do not make the step into human experience as the learning history approach taken here allows. Offers the thematic findings as complementary to existing theory but proposes these only go so far and that at some point theory needs to be put fully aside.

Chapter 14: Questions about the Postheroine: Puts theory aside and explores, from a personal point of view, notions of myth and heroism that recur through the work. Characterises the human beyond the postheroine seeking implications and learning for how to play my part in an evolutionary process. Concludes that meaningful action can only be reflected in moments of elegance that represent possibility rather than results.

Closing

Endings

Gateway of Experience
The Merton Learning History

Introducing Merton

Setting up the Read

A lot of what is discussed in this thesis centres on the creation of a set of learning histories and the subsequent work with them. To ground that discussion I want to first invite you into the experience of learning history by reading one.

Research participants have been invited to read a learning history in a way that allows them to construct their own meanings and learnings from it. They are encouraged particularly to respond on their own terms to the history and so to read it as a 'writerly' text. To support this invitation I have written 'Active Reader Guidelines'. Before starting you may wish to refer to the guidelines that were passed to participants at the learning history workshop. You will find them in Appendix A.

The Merton Rule is the history I am introducing here. It is the first one that was written and is presented unpolished to you. As a story it is the most engaging and accessible for readers outside local government. Note that it has been written for that audience.

Though stylistically it is the least developed history, it is also the one that has been most worked with different participants. The aesthetic of the history artefact is important as I will discuss later. Because of this I have included here the exact booklet form with which participants have also worked. A copy of this is also on the enclosed disc.

Reading Merton

Now take out the Merton learning history booklet or if accessing the electronic version open the Merton learning history file. Maybe flick through it taking in the key (p.7), the table of themes at the back (p.39) and the perspective adding section (p.33). An active read of act 1 (p.9-20) is a necessary experience for what is to come. It is important to get a sense of the content of act 2 (p.22-41), though a lighter read will suffice.

Reflecting on the Read

Your response

You have now experienced the Merton learning history in much the way as other participants in the research have. After the read, participants have sometimes been asked to fill out worksheets of their reactions and responses. You may wish to look at a sample worksheet in Appendix B and take a moment to note some of your responses.

Others' responses

On page 33 of the Merton learning history you may have read how this document has been taken to diverse audiences and how the responses varied within audiences as well as across them. Individual readers were often asked to fill out the worksheets or were debriefed in conversation. At the learning history workshop, where institutional actors came together, readers of Merton (six in all) recorded their own responses first in workbooks that were summarized and can be read on the learning history website.⁴ Then collectively they put their responses on a poster shown in Figure 5 on the next page. More will be said about that process later. For now I want to point to the diversity of feelings, interest and questions that can be evoked by reading a learning history.

From here I will move into the field of inquiry and action. The context of the research will be set out and then the chapters that follow will go into the questions raised by the research and some of which are illustrated already in the Merton learning history.

⁴ You can read a summary of the individual workbook responses to Merton on the learning history website
http://academicmum.typepad.com/lcw_learning_history_inno/learning_history_merton_rule/index.html

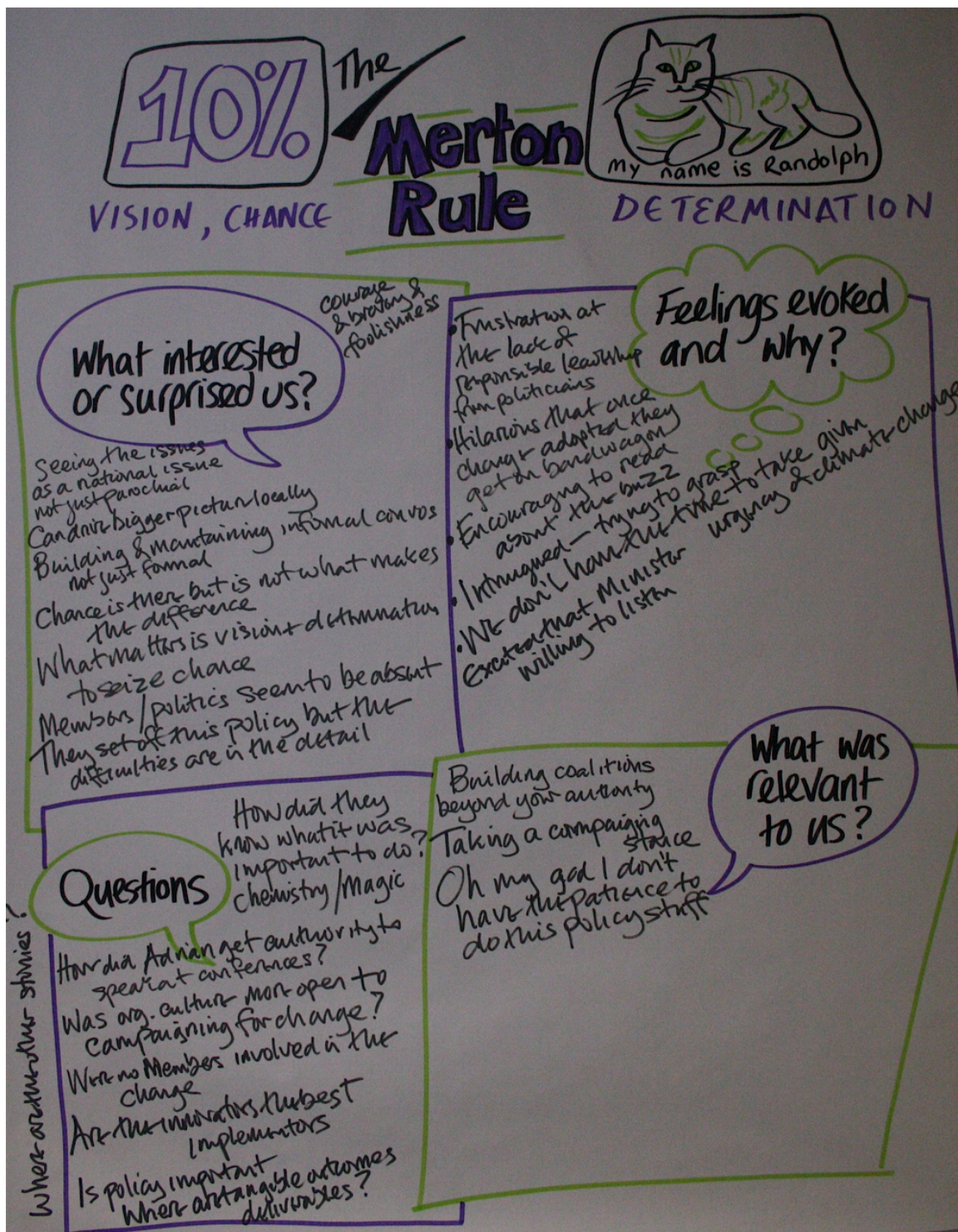


Figure 5: One response to Merton: workshop response poster (Feb 2008)

Part I - The field of inquiry and action
Theory, Method and Practice

2. Bridging: The Context of the Field

My research was set within the field of local government in the UK. In this chapter I will introduce the context of that field together with an overview of my activity within it. The primary purpose here is to fill in enough context to support what is to come and to sketch out the extent of the work. During the course of the research I engaged over a sustained period with seven local authority organisations and I had contact with several others. In this chapter you will be introduced to the participating organisations and you will get a précis of the four learning histories that are not included in the main body of the thesis. Additionally this chapter illustrates some of my research process: the way sites of inquiry were selected and the interplay between strategy and opportunism within that.

Context of Local Government

In keeping with the nature of this research which is based on narrative rather than on case analyses, the context of local government is described in a way that is intended to give sufficient support for the discussion in this thesis but no more. This mirrors the way structural context is handled in learning histories. For example in the Merton history, enough of the planning procedures are explained to support the story rather than to explain the working of these procedures in detail. Here, in support of the research story, I will describe how local authorities are distinct from each other and why it might be that different breakthrough projects have occurred there.

There are 434 local authorities (councils) in UK. These authorities are distinguished between urban and rural areas with the former being organised as city councils and metropolitan boroughs and the latter being originally organised as district and county councils. In recent years there has been a push to flatten hierarchies through the creation of unitary authorities. This reorganisation is still ongoing with district councils in Wiltshire and Cornwall for example being disbanded last year in favour of unitary authorities. Councils are directly or indirectly responsible for a wide provision of services in the local area that include transport, waste management, social support, leisure,

education and health. As a result any council manages a wide range of issues relating to the socio-economics of its locale and oversees a large estate within its geographical boundaries. This estate includes roads, schools, parks, woodlands, rubbish tips, municipal buildings and leisure facilities.

Local authorities are necessarily tuned to the local context in which they are situated and priorities within councils vary greatly in accordance with that context. Social issues – some examples are teenage pregnancy, unemployment, fuel poverty, community cohesion – and the need to address them vary greatly from council to council. Environmental, transport, land-use and economic issues are similarly localised. Councils are highly politicised environments. Elected members are usually politically aligned to a party and are answerable to the community as well as to their party. Unelected council officers - with whom I have mostly worked in this research - operate the council and provide continuity and political impartiality. Elections occur every 4 years and in areas with staunch political following the administration can have a strong bias to one of the country's main political parties: Labour, Conservative or Liberal Democrat. However in other areas with split political loyalties the elected majority administration can change quite often and when this happens there can be a sudden change in strategy and priorities. In this context cross-party consensus is vital if an issue is not to become politicised.

The unique situation of each authority and its responsibility to community agendas puts it in tension with central government where national agendas meet local constraints in a nexus of rhetoric, policy and scrutiny. Central government policies affect a wide range of areas ranging from land-use planning to waste-disposal and impact directly on a local government's degrees of freedom. Centrally dictated approaches to scrutiny and evaluation have traditionally been uniformly applied across all councils. At the time of conducting the research, the comprehensive performance assessment (CPA) was the evaluative framework for local government.

In 2006 the National UK carbon emissions were estimated to be in the region of 530-550 million tonnes of carbon dioxide (CO₂) and new statistics from Defra provide a relatively consistent set of figures that break the emissions down for each local authority (*source*: (Defra 2008)). These range hugely: from just 12,000 Tonnes CO₂ emitted in the Isles of

Scilly to 50 Million tonnes emitted across Greater London in the same year. However most local authorities emitted between 1-3 Million Tonnes of CO₂ in that year almost half (46%) of which came from the industrial, commercial and public sector. A further 29% of the emissions came from the domestic sector and a further 25% from transport (Defra 2008). What is important to note beyond the actual figures is that local government is one site where the delivery of carbon reduction in keeping with the government national targets can be stimulated and monitored. And this is something of which the field itself is acutely aware. In a self-critical report that pulled no punches in its evaluation of local government's track record on climate change thus far, the Local Government Association called on the local authorities it represents to step up to the plate:

Local government has a unique opportunity. On an issue of such global importance, it must demonstrate the power of community leadership. In doing so, it can lay claim to the mantle of place shaping. To date, with notable exceptions, its response to climate change has been largely 'business as usual'. The challenge is how we lever an historic shift in the response.

(LGA 2007 p.24)

However up until recently and within the timeframe of the research there was no criterion within the CPA framework that related to how a council was addressing climate change. Increasingly though, as the research was ongoing, climate change was becoming more accepted as an important issue at a national level. Publication of the Stern report in 2006 (Stern 2006) was the first governmentally sanctioned report to recognise and quantify the economic cost of climate change. And a legally binding framework to tackle climate change was put in place when the Climate Change bill became law in November 2008. Finally toward the end of the research period, in 2008, with a view to more devolved governance the CLG⁵ started to put in place a new performance framework in place. This new framework sees an increased focus on partnership working and greater flexibility for a council to set its own priorities. From a set of national indicators of performance a local authority can select and prioritise the key areas that will drive their

⁵ Department for Communities and Local Government

strategy. Of these national indicators, two are directly related to mitigating climate change⁶ and a third relates to climate change adaptation⁷.

With this summary I have wanted to convey a sense that the institutional field in which I was researching is continually changing in relation to the issue of climate change. I also want to convey a sense of what is distinctive about this field that leads to it sometimes creating the conditions for breakthrough carbon reduction projects to occur.

In summary that distinctive nature arises from the way that each local authority is unique and locally defined whilst being strongly bound to others via central government control and national policy. The federal nature of local authorities means that generally councils are more rooted in their difference than in their similarities with each other. This diversity is more likely to be allowed to flourish in the local government sector than in the corporate sector where uniformity of process will be more deliberately sought and diversity will be quashed. And it is this diversity that stimulates an entrepreneurial spirit to drive individuals or groups to address issues that are tangible and locally focussed. Finally the large size of each Authority, its substantial budget and responsibility for an estate that includes a large amount of infrastructure and building stock supports this spirit by offering sufficient freedom in which to innovate.

⁶ NI185: Reduce CO₂ across council's estate; N186 – Reduce per capita emissions in the council's jurisdiction.

⁷ NI188: Planning to adapt to climate change

Engaging in the Field

The London Borough of Merton was the first of seven local authority organisations involved over a sustained period in the research. In this section I will give an overview of the remaining organisations that participated. Four of these were, like Merton, involved in the creation of a learning history about a breakthrough project. I then went on to work with two further local authority organisations to inquire into the value and learning to be had from the original set of learning histories.

Learning history selection

The four learning histories that were written in addition to Merton are available in the appendix of this thesis. These fruitfully support the discussion in several chapters though are not essential to it.

The main reason for including these learning histories in the Appendix is because they are important artefacts of the research process. So it is as much for their historic importance as it is for their supporting content that they are included here. They are unedited, left exactly as they were written and shared with participants from local government. The tone and detail in the learning histories reflects this as later chapters will describe.

The next section will summarise the four remaining learning histories giving an overview of each project, the basis for its selection and the writing of the history itself. In doing this, I will also keep the thread of happenstance alive. Whilst there was a logic guiding my search for projects to feature there was also an element of opportunism that, when exposed, conveys some of the realistic challenges there can be with inviting oneself into a particular field.

The Nottingham Declaration

Organisation: Nottingham City Council

Region: North East

Population (2006): 286,000

CO₂ emissions (2006): 1.8 Million Tonnes

Project overview

The Nottingham Declaration is a declaration on climate change that was set up in 2001 and relaunched in 2005. As the name suggests it originated with a group in Nottingham who galvanised several local authorities to sign the declaration and so make a voluntary commitment to put a plan in place to tackle climate change within two years. Like Merton it was an innovative idea that had had some considerable success in spreading. Over half the local authorities in the country had signed it when I visited Nottingham. Unlike Merton it was an executive-led campaign with strong ministerial backing so it offered a good comparison.

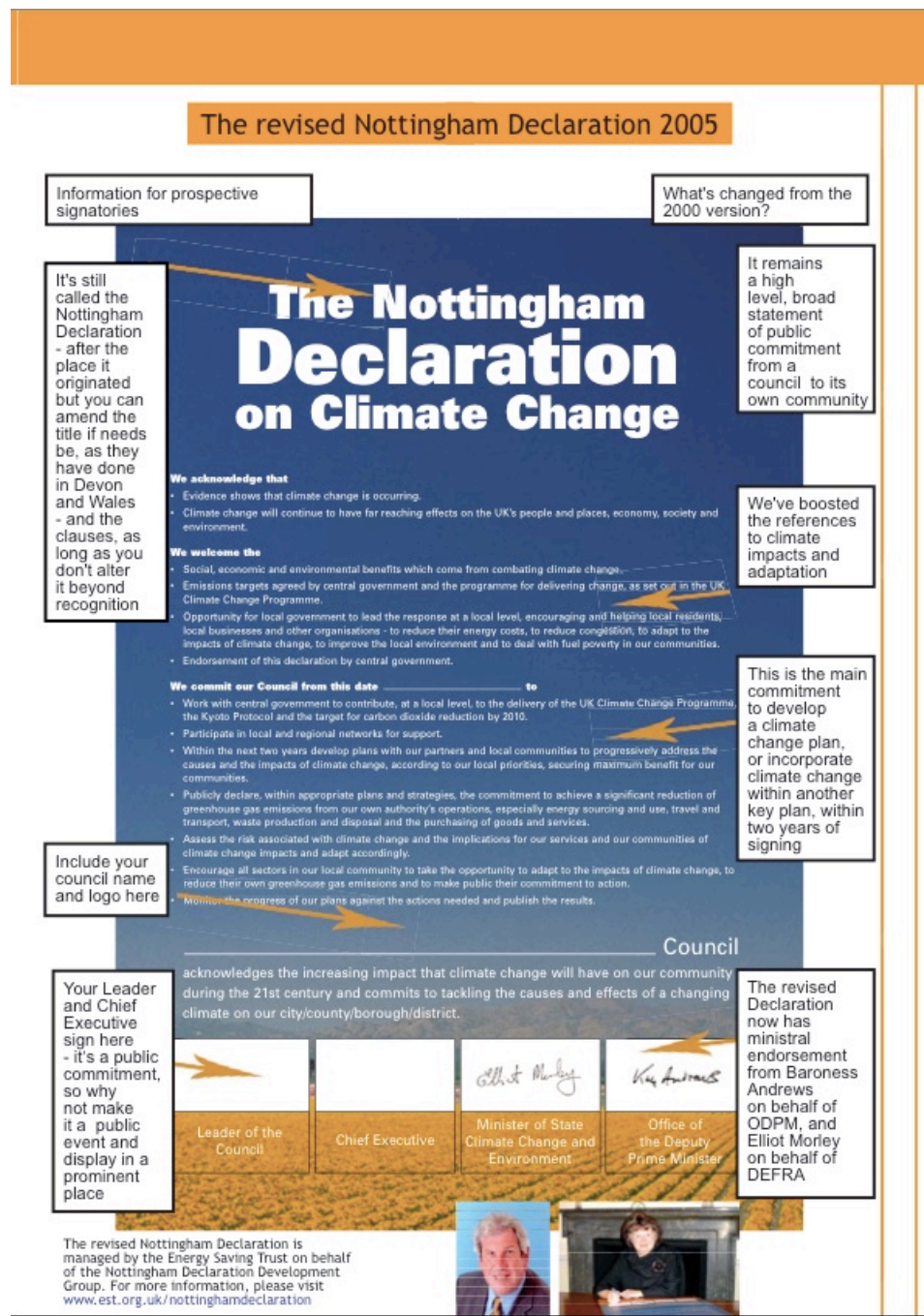


Figure 6 The Nottingham declaration on climate change

Engaging: Jan 2007-October 2007

A friend Helen had told me about the Nottingham declaration. She mentioned she had a contact at the council there and she sent me his details in late 2006. I sat on it. Finishing Merton, I wasn't yet ready to decide which case to do next. Nottingham was a possible

rather than a definite next step.



9th January 2007

Then, I get an e-mail: It is a nudge to get in touch with that contact in Nottingham that I had filed away until I was ready. I need to reply, I pick up the phone. It is meant to be a holding call. I'll tell him what I plan to do and when my plans will be finished. But it doesn't go like that. One thing leads to another and I suddenly have a meeting set up in Nottingham for the 16th February

In February 2007 I interviewed Mike Peverill from Nottingham City Council. I wrote some of the history up soon after but the interview data showed gaps in the early history. And those gaps could be filled by Steve Waller who had left Nottingham and who worked now at the Improvement and Development Agency for local government (I&DeA). His role there was very relevant: he was involved with running the Beacon scheme, which is a scheme for sharing learning from best-practice within local authorities. In June I contacted him, introduced myself and, as he would later say, was lucky to get him at a good moment on a Friday afternoon. We had a good call and he became interested in the research. In July 2007 I met him to interview him about Nottingham and also to discuss the research overall. His interest and endorsement of the work was later to play a vital role in opening up channels into the local authority networks when it came to recruiting people to come to the workshop. With Steve's input I could now complete the Nottingham history which I finalised in Autumn 2007.

The Nottingham learning history (précis)

A tale of symbols, strategy and confidence

The Nottingham learning history tells two intertwined stories. In Steve's story it traces how the idea for the declaration emerged against a backdrop of political support and championing of environmental issues that had been steadily built up in Nottingham city council through the 90s. It was his boss's executive level interest in green issues that gave Steve the freedom to devise the declaration as a way to link rising concerns about climate change to a commitment to act. However with a switch to Mike's story, the history then charts how subsequent changes at executive level in the council saw priorities shift in a way that made sustaining energy behind the declaration almost

impossible. Mike's story describes how he worked in this context to maintain confidence and tenacity. A key moment occurs when he acts as an 'agent provocateur' and convenes a group of stakeholders from outside the council to Nottingham saying 'look guys we need to do something'. Together this group re-forms a coalition that renews the energy behind the declaration.

This then is a history about waxing and waning fortunes. It dwells on the symbolism of the Declaration and muses on the mythic qualities of the story that features portentous floods, executive gatherings, giant postcards and ceremonial signings.

Selecting

With two learning histories involving the spread of the *idea* of using low carbon technology I was keen now to have examples that directly involved the technology. Through web research, mail-shots and conversations with various contacts I was starting to build a picture of what projects would be worth featuring. One key contact at this time was a friend, John Malone who works as a renewable energy consultant. Together we talked about potential projects, the different qualities they had and, as importantly, the key characters involved. From this discussion Barnsley and Kirklees both came out as fascinating projects that involved low carbon technology but were different from each other in so many ways.

Barnsley

Organisation: Barnsley Metropolitan Borough

Region: Yorkshire and the Humber

Population (2006): 223,000

CO₂ emissions (2006): 1.95 Million Tonnes

Project overview

Barnsley Metropolitan Borough Council, over a period of twenty years, has drastically reduced their heat-related annual carbon dioxide emissions through the use of locally sourced wood biomass. Heat emissions that stood at 70,000 Tonnes in 1990 had been

reduced by a third to 48,000 Tonnes by 2005. The reductions in CO₂, that put Barnsley some fifteen years ahead of government targets, were achieved through a range of energy efficiency measures and an unrelenting and successful program to shift the majority of the council's estate heating from a coal-base to wood supplied largely from the some 12,000 Hectares of South Yorkshire woodland surrounding the county.



Figure 7 Waste wood awaiting chipping at Smithies Yard in Barnsley

Engaging: June 2007-December 2007

With Barnsley and Kirklees, I watched clips on the Internet to get a feel for each project and for the characters involved. John had cautioned that Barnsley was known to be a bit like Woking – it was a project that had been brilliantly executed by a technical expert. The internet clip of Dick Bradford confirmed this for me. He was clear, factual and very expert. Getting a human story of highs and lows might be tricky. Nevertheless I went ahead. Just because I might not get a good story was not a basis to exclude Barnsley. The challenge of shaping a technical story would be interesting for the research.



Journal June 5th 2007 - Barnsley

Good news! John has made contact with Dick Bradford and Dick is happy not only to talk but also to meet. I start to prepare and write briefing notes and wonder why does this never get any easier! It is 12:41 - why don't just pick up the phone and call him and set the date?

That introductory call went well and a meeting was set up for a few weeks later. In June 2007, in the beating rain I drove around Sheffield to get to Barnsley and spent just two hours there speaking to Dick. I wrote the learning history soon afterwards completing a draft in July 2007. Later in the Autumn I added one additional perspective.

The Barnsley learning history (précis)

Biomass: It's a no-brainer!

This history largely focuses on the journey of one man, Dick Bradford, who formed a vision for Barnsley's energy future and then set about making it happen. In Dick a breadth of technical and strategic knowledge supports an unswerving confidence as to how to do things. The story describes how, over twenty years, as success builds on success, Dick wins unequivocal trust in his expertise and with that the freedom to innovate. Inspired by the sight of vast storage sheds 'stacked to the gunnels' with wood when he visits Switzerland in 2003 he forms a vision of using local biomass back home. And on his return he puts in place the complex links to make this possible. The history charts a very elegant journey of innovation where risks are pitched perfectly as the vision rolls forward in stepwise projects that fit in a timely way to the current needs of the council. Dick's expertise and his grim determination create the conditions for the project to fly and for his vision to be realised. This is a champion's story suggesting perhaps that it is extraordinary people who make extraordinary things seem possible. "It's a no-brainer" is a phrase Dick often repeats. This refrain is discussed in the history in an attempt to understand why something apparently so simple in Barnsley has been difficult to recreate elsewhere.

Kirklees

Organisation: Kirklees Metropolitan Borough Council

Region: Yorkshire and the Humber

Population (2006): 398,000

CO₂ emissions (2006): 3.1 Million Tonnes

Project overview

In Kirklees solar power (thermal and photovoltaic) has been installed on new and old council buildings as part of an ongoing and long-term commitment to improving housing in the community. Though the carbon reductions are not high - they quoted a mere 175 tonnes/annum savings of CO₂ - the anomalous nature of this project is fascinating. The picture below shows Primrose Hill, Huddersfield that at one time was known to be one of the most deprived areas in the country. Note the saw-toothed eco-houses side by side with older council houses all sporting solar panels. How had this happened?



Figure 8 Solar panels on council houses old and new in Kirklees

Engaging: April 2007 – February 2008

Kirklees was a great comparison to Barnsley. They were in a neighbouring borough and yet were using a completely different technology. If ever there was ferment, then this was it. The video clips I watched only increased my motivation to feature Kirklees. I smiled as I watched pensioners pointing proudly to their solar meters and competing with each other on the readings. Kirklees included a community aspect that had been absent from the other histories. Again, using John as my contact I made an approach. However as easy as Barnsley had been to set up, Kirklees was difficult and protracted.



Journal April 4th 2007 - Kirklees

The reply from Kirklees is evasive - perhaps she hasn't had time to read my mail properly and/or perhaps she's handling this kind of request all the time? She invites me to an open day but makes it clear there will be no time for interviews.

Eventually, after several calls and e-mails with the contact there, I was able to persuade her to ask those involved if they would be willing to be interviewed. Of the original team, two people volunteered but to my disappointment, no one came forward from the local authority itself. Jimm (sic) Reed was from the registered social landlord company (RSL) and had project managed the new-build of the eco-houses. Richard Gardner was from the housing association and had been involved with tackling fuel poverty. He had worked with council tenants, explaining to them the energy improvements the council were making and eventually encouraging them to opt into the solar scheme.

I conducted the Kirklees interviews the day after I had been to Barnsley in June 2007. It was raining again as I drove around Sheffield to get there. That evening, in the beating rain I got the train home. The North of England suffered severe floods that week and these were to be repeated throughout the UK that summer. Later that week Sheffield suffered extensive damage when the river Don burst its banks. A 14-year old boy and a 68-year old man were killed.

The Kirklees learning history was difficult to write because the two threads were so different. And I was clearly missing a lot. Eventually I wrote the history in November 2007 and signed it off, with no additional perspectives in February 2008.

The Kirklees learning history (précis)

A lonely Solar Pioneer

The history intertwines the two different stories of Jimm and Richard that share the common thread of what it is like to be on the ground and working to introduce a new technology. Challenging interactions with funders, communities, engineers and managers pepper the account. These give way later to celebrations and royal visits as the solar projects become successful and a source of kudos. The history highlights the unstoppable nature of a project once it builds a momentum. Jimm describes the genesis of the eco-houses when, riding on the positive vibe in a meeting, he sketches out their saw-toothed roofs. From there the project unfolds and problems – technological and otherwise - simply must be met head on. Richard's story brings the council tenants to life not as end-users of solar technology but as people who have whole lives. His tireless engagement around energy improvement is in tune with those lives and with the social issue of fuel poverty. He doesn't talk about solar panels, but about fridge magnets, helplines and keeping the whole house warm so that accidents are avoided during the commercial break of people's favourite soap opera on TV. The learning history discusses why Kirklees is a lonely pioneer. Though solar installations save a relatively small amount of CO₂ relative to their capital costs, Kirklees shows how solar power has been much more broadly beneficial in terms of building community, reducing fuel poverty and supporting social regeneration.

Selecting

By Summer 2007, I had four learning history interview data sets and had written up 3 of them. I was now more familiar with what was going on in the field and with my contacts, particularly with the support of Steve at the I&DeA, I had more legitimate ways of approaching people. The fifth case then was one I had the luxury to select.

Southampton's District Energy Scheme had become an obvious choice. Using geothermal water from an aquifer below the city and combined heat and power (CHP) technology they had built a localised energy distribution network that was comparable with Woking. Unlike Woking however it was little known in the public domain.

Southampton

Organisation: Southampton City Council

Region: South East

Population: 228,000

CO₂ emissions (2006): 1.4 Million Tonnes

Project overview

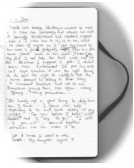
Some 11K of pipes run underneath the city of Southampton to supply heating and, more recently, cooling to some forty commercial and civic buildings. The network saves its customers an estimated 11,000 Tonnes of carbon dioxide annually. They had 'done a really good job persuading commercial customers to connect' I heard when I was up in Nottingham. I was interested to hear how.



Figure 9: The geothermal heat station in Southampton

Engaging: September 2007 – February 2008

With an introduction from Steve Waller, and Histories already written, my approach was now much clearer and was successful.



19th September 2007

A good call with Bill at Southampton gives me a lot of hope that it will be a good learning history.

In September I travelled there and interviewed Bill Clark in September and started writing up soon after. As I did it became apparent there were gaps in the early history. Bill had only recently taken over from Mike Smith who had set up the scheme and run it for many years. So, in January I returned to Southampton and interviewed Mike at the heat station. After that I gathered perspectives from others who were involved. Of the five histories, this felt like it was the most 'properly' written benefitting perhaps from my cumulated experience but also from the collaborative nature of the project I was featuring.

The Southampton learning history (précis)

A tale of collaboration and steady ambition

The Southampton learning history follows the project from the fuel-crisis in the 70s when the first geothermal well was dug by the Department of Energy. Mike goes along to have a look and so starts a journey that sees him convert into a passionate and tenacious advocate for geothermal energy. The history is characterised by a constant movement in this story between champions and coalitions that form and reform around an idea that itself changes over time. Political will underpins the project. Trust and partnership are recurring themes throughout. A pioneering private-public partnership to run the scheme is put in place by those in positions normally risk averse: the chief finance director (Mike) and the council's lawyer (Jacqui). The interdisciplinary team put in place to operate the scheme is described to have had a 'special quality' of capability.

The vision of the scheme changes over time. Whereas the early years see a pre-occupation with the wells and the geothermal waters, Bill tells how, in more recent years project's sense of itself gradually refocuses onto the potential of the energy network itself.

The ambition is also vested over time in many actors. This is a striking antidote then to the champion's tale. Though extraordinary characters come into relief through the story, the over-riding story is one of collaborative achievement. Over the course of the project, layered partnerships of trust and knowledge link players from different disciplines and organisations together in timely ways. End users, commercial partners, different council departments and even projects of a similar nature at home and abroad are drawn into a framework of mutual learning and collaboration that characterises the project. This distributed capability sets Southampton apart as a project with good chances of being sustainable and growing to enjoy continued success.

Second cycle participants

By second cycle participants I mean those organisations that worked with the learning histories that were produced. The purpose of these inquiries was to understand the value to had with the learning histories and the different possible ways of working with them. At the learning history workshop that will be described in Chapter 5, fifteen further local government organisations participated. These organisations are not described here. However two further local authorities became directly involved in the research over an extended period. They are introduced briefly below for completeness. The work with them is described in later chapters of the thesis.

Brighton and Hove

Organisation: Brighton and Hove

Region: South East

Population (2006): 251,000

CO₂ emissions (2006): 1.3 Million Tonnes

Engaging: May 2007 – September 2008

Brighton and Hove council was the site for 1:1 work with Thurstan Crockett. My meeting with Thurstan was opportunistic. I was going to Brighton to give a seminar and had been passed his contact details by my project colleague Susan.



17th April, 2007, E-mail from colleague Susan Ballard

Hi Margaret, Just had a good call with Thurstan Crockett: sustainability officer at Brighton. I told him more about what you are up to and he's very interested and willing to give you interview time (within reason) I suggest you follow up either with an "actually I'm not interested anymore" or to fix a date for a meeting or phone call. Strike while iron is hot!

To which I replied on the same day

Thanks, thanks Susan. Have organised to meet Thurstan in May (took a chance and phoned him with kids + dog settled :)

I will write more about that meeting later in Chapter 4. Thurstan read learning histories as I wrote them and, in a series of phonecalls spread over about a year, we inquired together into the value of them and their relevance to his work. Chapter 7 will touch on some of this work.

Bath and NE Somerset

Organisation: Bath and NE Somerset

Region: South West

Population (2006): 176,000

CO₂ emissions (2006): 1.1 Million Tonnes

Engaging: June 2007 – Mar 2009

Bath and NE Somerset is my local council and was the site for a sustained inquiry into working with learning history. Over a period of six months from June to October 2008 I ran a series of seminars with a small group of council officers there. These seminars were orchestrated with the help of my key contact at B&NES, the corporate sustainability manager Jane Wildblood who is a passionate advocate for green issues. My engagement with B&NES was one I sought out quite strategically. I will describe this and the work in more detail in Chapter 12.

Scoping the field: reflections

This short account hopefully conveys some of the typical realities of working in an institutional field the way I did. It was only by engaging in the field, not really knowing what I was doing, that I could start to know what I was doing. The difference between my arrival at Merton in September 2006 and at Southampton a year later was very different. By the time I arrived in Southampton everything was clear, convincing and authoritative. I knew what my story was by then. I had practiced telling and re-telling it over time.

In describing my engagement with the field I have wanted to be somewhat consistent with learning histories which are messy accounts. They have highs and lows, moments of doubt and dilemmas of decision. Writing this way helps me reflect more levelly on how

I engaged. I remember that particularly in the early stages I had to be watchful not so much of the decisions I was making but of which decisions were making me. I needed to constantly trade-off opportunity against coherence in the research. And this leads me to reflect now on the decisions I made *not* to include certain projects. For example I pursued, with some energy, the possibility to feature a low carbon exemplar building from the National Trust, a much loved heritage charity in the UK. Researcher colleagues rightly challenged me that this did not fit with the local authority field. I reflected on the challenge, reviewed how I was drawing boundaries and decided ultimately not to follow the lead. In another case I actually interviewed an individual who had influenced at a regional level the putting in place a new zero-carbon target. Here the storyline fitted but on reviewing the interview data it just didn't work for me. So I dropped it. It was only months later, when I asked the participant for feedback that I learnt how my ambivalence about the case had confused and disappointed her. I realised I had not been watchful to treat this participant with due care, but luckily my checking procedures had surfaced the issue and we concluded our relationship on good terms.

In Chapter 6 I will talk in detail about the quality criteria I evolved for the research. They are in evidence in the above reflection. I had them in mind as I wrote. However at the time of acting they were less explicit. Likewise they remain, for now, implicit.

3. Questions of Theory and Purpose

Like the four other learning histories, the Merton learning history draws in theories that, at the time of writing, I was engaged with and that seemed to be particularly well illuminated by that case. The theories I refer to here could be broadly termed ‘theories of change’ and do not include methodology. They are theories that in some way suggest understandings of processes of change at an individual, organisational or sociological level. The sketch below locates very roughly, using stars, the theories I drew into the Merton learning history.

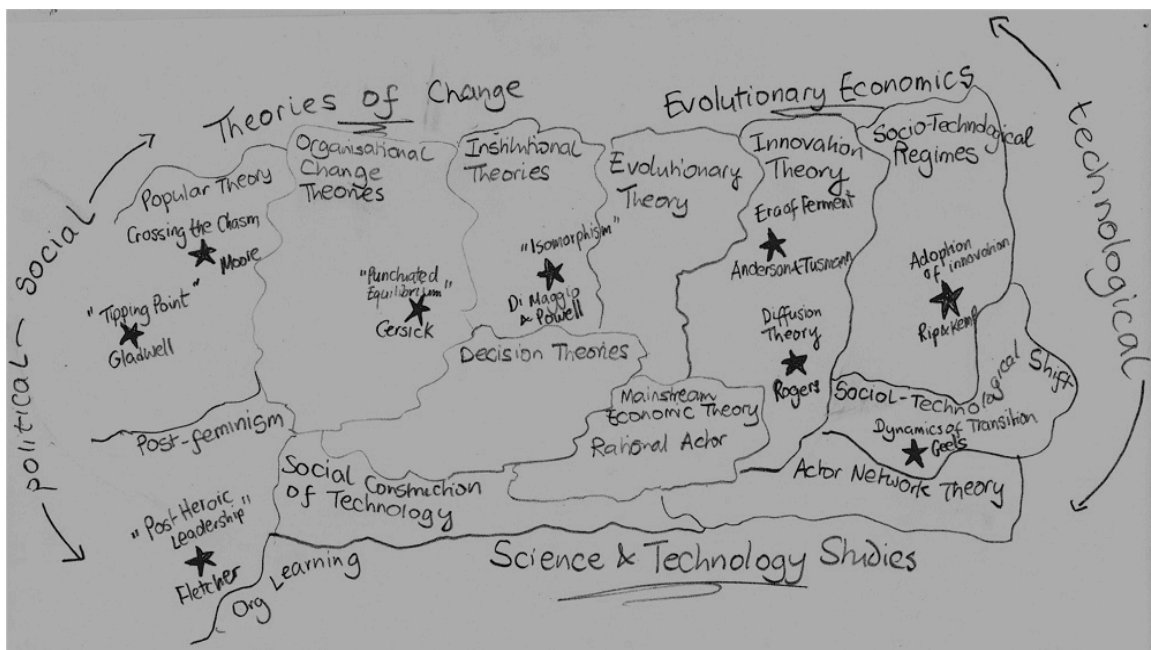


Figure 10: Rough sketch of theory points used in Merton

The use of theory in this way might well raise questions. Why those theories? How was I working with them? What purpose did they serve – for the research and for participants? In this section I reflect on such questions of theory and purpose trying to draw out as I go the different purposes these theories have served in the research that include: drawing out my own position on change; creating a rationale for the research approach I took; setting a theoretical platform which I would develop in the research; and finally providing

a base of theory that I would use to enrich the learning histories.

The above sketch might well be tidied up and categorised more neatly. It includes a span of theories that work with different units of analysis: the individual, the organisation, the institution, the sociotechnical system and so on. But instead of tabulating these, they are all jumbled together in this messy sketch. I show this because it seems a truer representation of how I carry these theories in my mind. There is a rough order in it too. It flows temporally from left to right. On the far left are theories I brought into the work with me. Postfeminist theories that included Joyce Fletcher's ideas about relational practice were an area that had been important to me during my MSc work. So too had been the popular ideas of complexity theory. Moving in from the left my PhD literature survey started with organisationally located 'change theory'. I branched from there into institutional theory, touching at times into interesting sociological theories of collective behaviour, some of which were building on evolutionary theories of economics. I rooted right down into individual decision making theory too. I then moved to the set of theories on the right hand side of the diagram. These have a different feel as they are more strongly built on science and technology studies and economics. With these theories technology and its relationship with the social world is the focus.

This chapter will follow the sweep of the sketch from left to right. First I start back with the purpose of the research, as it was introduced in the first chapter. I will explain how it was the attempt to connect this purpose to theory that guided the flow of my theoretical survey.

Theory and the 'Big Issue'

The 'big issue' of climate change and the need for a rapid decarbonisation of our society was the cold fact at the centre of the Lowcarbonworks project and by extension at the centre of my work. One way of describing the Lowcarbonworks project and my research work in particular, might be as an attempt to find some cogent way to take the 'big issue' of climate change and convert it into meaningful and appropriate action. During the first year of my studies, in a search for what is cogent, I spanned a range of literatures that were connected in some way to 'change' and 'technology'. The choices of where to start with the literature were driven by the framing of the project which centred on the idea of

'lock-in'.

There is a systemic interplay between technological, economic, and human factors which creates a form of systemic conservatism. Theories of complementarities in economics and organisational change show that attempting to change one factor alone may be of limited impact; it may even be damaging if it causes the whole system to '**lock in**' to a suboptimal path. However, addressing several of these at the same time, can result in a virtuous cycle of change

--- From the Lowcarbonworks research proposal

The thinking behind the project was that as a society we are "locked-in" to our use of fossil fuel based technologies and that this "lock-in" is held in place by a variety of psychological, organisational and sociological factors. Only by addressing these factors simultaneously might change be enabled. On the project we wanted to explore this idea. This meant looking at change as it occurred across different levels from the individual to the collective and embedded in a cultural, technological, economic and legislative context. David Ballard, who was instrumental in initiating the Lowcarbonworks project, proposed a tool to help us test this view in practice. "The Wilber/Ballard Matrix" (Ballard 2006) draws on Wilber's 'all-quadrant, all level' integral conception (Wilber 2000) and integrates it with complementarities theory (Sanchez-Runde, Pettigrew et al. 2003) to suggest a way of taking a multi-levelled, contextualised view of change.

Barrier/Opportunity Mapping Tool	
Person <i>Individual subjective factors</i> (values, worldview etc.)	Job <i>Individual objective factors</i> (socio-demographics, knowledge etc.)
Company <i>Collective subjective factors</i> (culture, shared norms etc.)	Industry <i>Collective objective factors</i> (Political, economic, technological, etc.)

Figure 11 Ballard/Wilber 4 quadrant model (based on (Ballard 2005 p.5))

The figure above shows how the matrix orders the factors enabling or inhibiting change into four quadrants defined by two axes. The vertical axis runs from the individual to the collective and the horizontal axis runs from the subjective and objective. The matrix tool proposes that by looking at factors across the four quadrants and seeing how they line up and/or complement each other, a more comprehensive view of change or 'lock-in' might be reached. For example an individual might be subjectively committed to a

change agenda, and he/she might be empowered in her job to do so. However if collectively the regulatory context for that change is difficult and/or the organisational culture is one that is not encouraging of it, change may still not occur; the situation may be locked in. The Wilber/Ballard Matrix was a tool offered to be of practical use in the project, and I also found it useful to guide my literature survey so that I too would have theory of change that made sense quite comprehensively and that would link to the project goals.

Using this framing I started to pick a pathway through the various literatures on organisational and technological change. This chapter will describe how it was in this way that I could slowly uncover and develop my own position with respect to these ephemeral terms: 'change' and 'technology'. And as I did this idea of 'lock-in', and to an extent the Wilber/Ballard Matrix that had been so engaging at first gradually became less important as I started to adopt a more flowing, less instrumental view of change. So I introduce the project framing and assumptions here not because they became central but because they oriented me well into my theoretical inquiry. From there I could build a piece of research that connected to the ultimate purpose of addressing 'the big issue' in a way that made sense to me.

The remainder of this chapter relates to that gradual unfolding of position. It divides loosely into three parts delineated by the sketch: the left side, the middle and the right hand side.

In this chapter, in keeping with what I am striving for overall in this thesis, I am attempting to present a multi-layered account of my work with theory. I will present the destination of my literature survey – the position this reading has led me - but I will also be giving some sense of the journey. Some sections and reflections will be more personally toned as I explain how I engaged and reacted to some of the ideas and tested them against my own experience.

The Left Side

Organisational change theories

I started with organisational change theory seeking insight and integration. Though much of the organisational literature is set within a frame where business success and longevity is the ultimate aim, I thought there may well be insights from that literature that would integrate well in a project that at its heart was trying to understand why organisations are not changing. What I found there was insight but also confusion and frustration.

Insights

One key insight was into the nature of organisational routines. Organisational routines are repeating patterns of behaviour that reflect a collectively held wisdom of how things are done. Routines are embodied in procedures, standards and taken for granted cultural norms. They express a dynamic stability that has been described appreciatively as a source of capability for change (Feldman 2003). However, more commonly the change literature describes them as degenerative linking them to rigidity and organisational inertia. There is the threat-rigidity hypothesis (Staw, Sandelands et al. 1981; Gladstein and Reilly 1985) that claims that groups, under threat, will seek recourse in existing routines. Or there is routine rigidity (Gilbert 2005) which has been defined as a key source of inertia. Finally there is success rigidity (Miller 1994) where fearful of breaking a running system, organisations aren't change existing patterns of operation and so fail to recognise and respond appropriately to changes in their surrounding environment. These perspectives do give an insight, albeit a depressing one, into why 'business as usual' is a cycle that is hard to escape despite growing awareness of the environmental crisis.

This depressing insight was to be repeated as I moved upwards from the organisation to the level of the institutional field where the field is defined as a set of organisations that:

In the aggregate constitute a recognized area of institutional life

(DiMaggio and Powell 1983)

DiMaggio & Powell propose that in a field of organisations there is much less variation in how organisations operate and do business than might be expected. They propose that organisations rapidly become like each other – they term this isomorphism - because there are homogenising mechanisms that tend to push out diversity in the field. As a result organisations change in directions that are convergent with each other. The mechanisms that cause this to happen are: *coercive* – organisations might be different but they share the same formal and informal pressures including regulatory structures and cultural norms. Secondly there are *mimetic* mechanisms – organisations will tend to look at how their competitors do things and evolve their practices and processes in relation to each other. Finally there are *normative* mechanisms – as work becomes increasingly professionalised, organisational boundaries are made more fluid by the mobility of the professional who identifies as much with the network of professionals to which he/she belongs as to the organisation of which he/she is currently a part. The result is, that at the institutional level, there is also rigidity and resistance to change.

Highly structured organizational fields provide a context in which individual efforts to deal rationally with uncertainty and constraint often lead, in the aggregate, to homogeneity in structure, culture and output

(DiMaggio and Powell 1983 p.147)

Institutional theory is highly relevant to my work as it offers a perspective on the processes that exist at the inter-organisational level. Note that here I use the terms 'inter-organisational' and 'institutional' interchangeable. Later, in the method chapter, I will distinguish these terms. As the Merton history shows I reflected on how these mimetic and coercive processes worked in favour of the spreading of the Merton Rule across the institution of local government. In setting the context of local government in the last chapter I noted how organisations are connected to local issues giving rise to a distinctive federalist feel that can stimulate an entrepreneurial spirit. 'Mimetic' forces in this context will be dampened. 'Competitive' forces are different to those seen in the market driven private sector. So institutional theory is supporting two important points in this thesis: the first is that that the field of possibility for organisations and sets of organisations can be very curtailed. Taken together with the theory on organisational routines it would seem that organisational and individual social processes can interlock

quite quickly to limit further explorations of how things might be done differently. If possibility is diminished, then so too is exploration and vice-versa. 'Lock-in' could be described as the inevitable result of this vicious cycle. Secondly, as an institutional field, it would seem that the distinctive nature of the local government makes it less subject to homogeneity than other organisational fields that are more directly market driven. This supports what this research has observed: the conditions in this field have led to breakthrough projects occurring.

Returning to the unfolding literature review, what I was finding quite early on from these various literatures on change was substantial evidence for the view that 'change is difficult'. This would later be greatly boosted by the sociotechnical theory I covered. But already I was starting to build the following argument.



Insights: Business as usual is the norm.

Forces within and across organisations do exist to perpetuate practices of 'how things are done'. Though the lack of organisational and societal change toward decarbonisation might be frustrating it should be viewed more realistically as the norm rather than as the anomaly. So projects and organisations that have successfully managed to reduce carbon are anomalous and worthy of study.

Confusions

As much as I found insight in this part of the literature survey I also felt critical of it for a number of reasons. Where theories were being offered as analytical aids to thinking about or describing organisational life, I found them helpful. Institutional theory is one such example I have cited above. What I found less helpful - and this occurred in several places in the organisationally centred literature - was when the theories then moved from being descriptive to prescriptive. This shift would occur when helpful descriptions of relevant aspects of organisational life might be further and further broken down and defined and with this continued application of the logical lens would come a more deterministic message. This message implied, it seemed to me, that if these factors were addressed then 'change might be achieved' or 'inertia might be overcome' or 'better decisions might be made'. To give an illustration: in one paper 'organisational inertia' was proposed as resulting from the dual effect of an organisation being rigid in its

organisational processes ('routine rigidity') and rigid in its investment patterns ('resource rigidity') (Gilbert 2005). This seemed a helpful way of looking at inertia. However in the paper these rigidities were then further characterised in relation to each other and mechanisms to overcome these rigidities were discussed as though, if they were, inertia itself might be overcome

And at the level of the individual - in organisationally-situated decision theory- I also found this tendency toward recursive definition going beyond a point that was helpful. So for example one conceptualisation of decision-making emphasises how the diagnosis of an issue is crucial to the final decision relating to it (Mintzberg 1976). And prospect theory goes on to propose that individuals often classify issues according to risks but they do not properly accord those risks with an appropriate probability. Hence decision-making can seem irrational and inconsistent (Kahneman and Tversky 1979). So far, so good. Here a helpful and accessible picture of some organisational decision-making is being painted. However later literature then builds on for this with more abstraction that seems to break the link with any real experience of making decisions. One paper for example proposes a further nine determinants of how individuals classify issues (Sitkin and Pablo 1992). This just did not seem realistic or even helpful to the way I made decisions and I will return to this point in the middle section of this chapter.

This continuous naming and definition of 'factors' and 'dimensions' seems to be a trend throughout the organisational literature and I resisted it as being overly mechanistic. Whilst it felt helpful to put a name on different dimensions of change, these definitions sometimes carried an assumption, sometimes implicit, that by addressing one dimension 'in real life' change might somehow be controlled. This just didn't make human sense to me. I started to term this a logical view of change: one that was helpful but ultimately unsatisfactory in that it assumed change to be quite defined, tangible and controllable.



Insights from confusion

The logical conceptualisation of change sees it as a defined and controllable process. It can be executed as a series of logical steps. It does not pay particular attention to the start or end point of the change. Change in these terms is an end in itself.

I see now that my irritable reactions to this literature were helping to reveal where I actually stood: I was uncovering my ontological position on change where I understand ontology to mean the assumptions that underlie my reality. The next section narrates an early exploration of this ontology of 'change' and introduces one overarching theory of organisational change that felt more compatible with my disparate reactions.

Exploring the meaning of 'change'

With my reactions to 'change' I had bumped up against a fault line within the academy that had been identified by Weick and Quinn. They proposed that change theory builds on one of two opposing conceptualisations of change and this had been a source of *"ongoing tension and energy in recent change research"* (Weick and Quinn 1999). Many theories of change, said Weick and Quinn, can be traced back to Lewin's description of change as an episode that occurs when a normally stable system is perturbed (Lewin 1951). The change episode is conceptualised as a disruptive sequence of 'unfreeze-change-refreeze' that can be quite radical. On the other hand, another set of organisational change theories suggest the opposing view that change is not a discrete or controllable episode but is a process that is ongoing at all times. Within this view *'change never starts because it never stops'* (Weick and Quinn 1999 p.381). Weick and Quinn sometimes referred to this second view as Confucian to indicate its ongoing, cyclical nature. They contrast it with the Newtonian cause-effect view of episodic change.

I explored this fault line of organisational change for some time in the first year of my studies. I found myself quite actively involved in the debate, taking sides, catching myself being seduced by some theories and incredulous of others. By noticing my reactions I could further tease out my views on change and, to add spice to the pot, my

responses did not land neatly along the faultline defined by Weick and Quinn.

Whereas I was drawn by the project aspirations, and perhaps by my own desperate hopes, to the idea of rapid, episodic transformation, I could not accept the Lewinian notion of change that suggested an organisation as a machine that can be taken down, reprogrammed and set running again. I agreed with those who pointed out that there is a fallacy in the belief that change can be programmed to happen in this way (Beer, Eisenstat et al. 1990). I was uncomfortable too with the characterisation of radical change that it was just one 'prime mover' or change agent who could see it through (Weick and Quinn 1999 p.373).

On the other hand I was drawn, pragmatically and by my postfeminist roots to the counter definition of change as an ongoing and continuous process evolved through collaborative relational ties, through conversation and through networks (Fonseca 2002; Shaw 2002). This was however a more incremental view of change; emotionally I wondered how incrementalism alone might bring about the kind of change needed for a shift on the scale of that required by rapid decarbonisation.

One theory of change, classed as "episodic" but incorporating a more Confucian ongoing view of change was punctuated equilibrium. Originating in the field of evolutionary biology, Gould and Eldredge had suggested that new species emerge from a rapid transformative episode of 'speciation' that punctuates a backdrop of more gradual evolution (Gould and Eldredge 1977). Connie Gersick had taken the theory into the social domain and had looked at how this same model of change was echoed in a diverse set of theories across the literature. Her examples – and these were drawn from literatures that ranged from adult development, to teams, to organisations and on the field of scientific knowledge – all suggested change occurring as a pattern of stable, continuous evolution interspersed with revolutionary episodes of sudden transformation. Gersick posed and explored 'deep structure' as the stable guiding patterns that knit a system together:

Deep structure is a network of fundamental, interdependent "choices", of the basic configuration into which a system's units are organized and the activities that maintain both this configuration and the system's resource

exchange with the environment. Deep structure in human systems is largely implicit

(Gersick 1991 p.15)

This was a very scientific definition but within that language lay a suggestion that could not be more relevant to the 'big issue' humanity faces: Gersick's theory suggests that when a system is pushed significantly out of tune with its environment, a revolutionary episode of transformation can occur. Such episodes are radical, and, in their breaking down of the deep structure can take the form of a collapse. Gersick's survey suggested that episodes of collapse can be precipitated by incoming 'prime movers' who are attracted to a system - be it an organisation or a system of thought – when it is in a state of impending crisis. Or, as in the case of teamwork, by the arrival of an unavoidable temporal milestone making previous patterns of performance no longer tenable. Though I found this analysis of the triggers at best incomplete, the theory itself was thus far the most resonant to the research subject and aspiration. It linked to notions of 'tipping point' change that are very popular in discussions of social change: where a social epidemic can cause a system to rapidly transform (Gladwell 2000). And it chimed with complexity ideas that I had explored during my MSc (Gearty 2006) and in the early days of my PhD. In complexity theory a system transformation arises not necessarily from radical action but from a cumulative tampering with its deeper structures. I felt emotionally drawn to the idea that chipping away might bring on the seismic shift society needed to address climate change. A repeated theme in my work has been the search for meaningful individual action in the face of 'the big issue'. Tampering that contributed to a big shift sounded appealing. In Chapter 14, I'll talk more about this tampering as a process of faithful rather than controlled action. For now, suffice it to say, Gersick with her bringing together of system transformation with humble human action had practical resonance for me and it oriented me out of the intellectual cul-de-sac into which Weick and Quinn had led me.

Overall my study of organisational change theory taught me as much about myself as it did about change. With its tendency to classify and define, it had provoked me. It was a lens that offered helpful explanations as to why organisations might not change but I found these explanations partial and, in their lack of context, somewhat abstract. The external political, technological and economic factors that would surely interact with any

organisational change program were often not discussed. And change itself was often discussed as an end in itself stripped bare of intention and not considered in relation to its shadow – the question of what to keep. Finally much of the theory was riddled with the idea of change as something that can be shaped and mastered. This was seductive but ultimately a view I could not accept. I was much more drawn to the evolutionary notion that we are swimming along in change not distanced from it: in a world that has a material reality. We live with technology; there are melting icecaps; realities such as these need to be included in any discussion of change. It is this involved, evolutionary yet purposeful, constructed yet material view of change that underpins the discussion in this thesis. I call it a 'visionary' view of change and I came away from this literature looking for theories that would support it.



Insights: A visionary view of change

Change has a quality of 'just happening'. It is not wholly controllable but it is purposeful. It needs to be considered in relation to human systems but also the material and the natural world. Change on its own is a meaningless term – it needs to be associated with a vision of where it is going and also in relation to what is remaining the same.

The Middle – Practice and Choice

This section zooms right into the experience of the human decision-maker that underlies any social theory. As a section it builds a bridge between the two main sections of this chapter by honing in on the piece of territory in the middle of my theory sketch. This is a territory that links to practice and experience and it is one I explored not only theoretically but also quite personally. In this section I will look more closely at individual processes of decision-making and explain why it was important to do this.

The possibility of human choice, albeit constrained underlies all
[discussions of climate change],

(Rayner and Malone 1998 p.xiv)

In their excellent discussion of climate change from a social sciences point of view, Rayner and Malone suggest that in responding to climate change humans can choose to do nothing, act to mitigate it, or anticipate and adapt to it. This is a macro-level view of the choice facing humanity. What does this mean in practice? The above quote and many discussions of climate change are somehow distant from the micro experience of individual choice in the here and now. Sustainability policy in the UK also reflects this distance. It polarises into two main areas of policy: one oriented at technological innovation, the other on changing human behaviour (Steward 2008). In both cases human choice is still distantly inferred through users and consumers. It is expressed in how people use technology or how they consume the energy and services of the market. This section is built on the premise that to support the research that I have been doing a micro view of choice and decision-making is necessary. In this section I zoom into this micro view, I explain why it is of relevance to the research and what it has meant to me in practice.

The left hand side of my theory sketch refers to theories of change at an organisational and system's level. In this territory the individual is presented as an idealised component of a collective. Where individual decision-making is discussed it is following an organisationally-referenced logic and it is often, though not always, presumed to be a rational process. Classical economic theory has likewise been built on an idealised view

of human behaviour. It assumes humans to be entirely rational. When faced with a decision, an individual is presumed to find the available relevant information, process it rationally and act accordingly. The question for me has been what are the implications of these idealisations? After all, theories, depending on what it is they wish to explore, be it an organisation, a society or a political system, need to make simplifications. But on the other hand, I feel that theory if it fails to account in any real way for the phenomenon of human behaviour runs a risk of building an edifice on shaky foundations. At a minimum such a theory runs a risk of becoming hermetically sealed into itself and difficult to translate into practice, an observation that, for an action researcher, has to be taken seriously.

And it is not only action researchers who have taken this disconnect with human behaviour seriously. Scholars from across economic, political and other social science disciplines have long suggested that the rational actor view limits the applicability of any theory that is built on it. This is a big statement, one that would warrant a chapter of its own, so I cannot fully set it out but can at least illustrate it. In 1956, the influential social scientist Herbert Simon argued that rational models of decision-making were a helpful but insufficient underpinning to much of economic and management theory. Adding a psychological perspective he coined the term 'bounded rationality' to imply that decision-makers were subject to the limits of their cognitive processes as well as the circumstances of their environment (Simon 1956; Gigerenzer and Selten 2002). So in reality they simply may not have time or the mental capacity to process all the information at hand. Or indeed their environment may be such that they cannot or will not seek that information out. Simon's approach is quite formalistic – it still presumes a degree of rationality is at work with human choice – but his argument is that this rationality will never be optimum. It feels faintly ridiculous to be dwelling on this careful argument when a quick check-in to my personal experience of making decisions as a mish-mash of logic and intuition would at a stroke refute the rational actor view of decisions. Perhaps it was a similar common sense that drove complexity theorist Dave Snowden to write in frustration that there is a 'general error in idealistic approaches' (Snowden 2006) to decision theory that renders many theories built on this error pretty meaningless. Humans are 'pattern-based intelligences' he argues who

evolved for a complex world in which prediction is dangerous, and hedging against uncertainty a sensible strategy..... We need to build our own patterns, in order to act

ibid. p.87

The alternative to an idealised approach is a naturalistic approach that works back from how human behaviour is and then proposes why it might be that way. Research psychologist Gary Klein pioneered naturalistic decision-making in just this way (Klein 1998). Having set out to explore how firemen made decisions under pressure, he was at first surprised to find that when he interviewed them on their return from the field, firemen couldn't remember making any decisions at all. From here Klein embarked on the study of understanding why the choices humans made in natural settings differed considerably from lab experiments. Through interviewing experts who make decisions under pressure he found that the choices in such settings were not made using deductive logic as much of cognitive psychology would suggest – so they were not rational - but they were made nonetheless effectively and drew instead on what Klein came to call 'sources of power'. These sources of power that typify naturalistic decision-making reside between human experience and the imagination. They are built on two pillars of human thought processes: pattern matching and mental simulation. Through pattern matching one's awareness of a situation can be heightened. Then it is by simulating, one after the other, a series of possible scenarios representing choices that the expert decides. It was in this way that Klein's firemen made their choices under pressure. They do not deliberate on and weigh up different options simultaneously.

The above discussion is relevant in several ways to the research. First it casts a question mark over the scope of theories that build on abstracted models of human action. This question mark lays the foundation for a recurring argument in this thesis that says: at certain points in dealing with practice and theory, a move to a narrative approach is necessary in order to rehumanise action in a way that is practical and accessible. This argument will be fully presented much later in Chapter 13. However I am drawing attention to it here because it also supports the choice of narrative approaches that will be described in the next chapter on method. If human choice relies on pattern and imagination rather than rationality then narrative has an important place in creating images and patterns that might link to choices.

Second the ideas of 'bounded rationality' or 'naturalistic decision-making' are necessary to have floating around if only to explain that when the obvious choice appears not to be made there is some reason for it. Throughout the learning histories there are examples of where an obvious choice to reduce carbon emissions is just not made. In the Southampton learning history, one company who stood to save money and emissions by connecting to the cost-saving district energy scheme did not do so because they had procurement policies for wall-mounted radiators. Such a decision, or in this case a non-decision, is well explained by Klein's model. Decision-makers in this case were clearly unable to move away from an internal mental image of 'how heating is done'. When an image of a district energy scheme with its big pipes and missing radiators and boilers was presented, it may well have been an image that simply didn't match.

Finally this section is very relevant to the practice of my research and its quality. Later I will write that quality in my research relied on my being watchful of the choices I was making. Having read Klein I started to explore just what the micro-processes of my choice making actually were. By the end of my first year of study I had developed a practice of taking a daily walk in the woods near me. I often saw these walks as an opportunity to let thoughts tumble through unchecked but at the same time observed. Sometimes I would then write about these thoughts trying to catch a sense of this jumble and one day, not long after I had read Klein's book, I wrote this:



March 27th, 2007

Reflections & Choices on a woodland walk

After a morning spent, not unpleasantly, but worthily slogging through to the end of the Nottingham case I strike up into the woods. Spring has sprung at last and perhaps reflecting this my head seems to be teeming with growth and new thoughts. Soon I'm lost in a stream of consciousness that goes something like this.....

I start thinking about where I ended up this morning with the Nottingham Declaration being not unlike a learning history itself. I don't know whether to be excited by this or take it as a sign that I am now completely lost in reflexivity. Next I hear myself mentally rehearsing explaining to Peter tomorrow that my learning history work needs to be maybe more multileveled than I originally described – that it's increasingly evident that I need to engage the different levels of the system – not only the apparent innovators. For example it'd

be most interesting to run the case of Merton by people perhaps in my local council – Bristol or Bath - and see what they make of it. I relax when I think like this because it de-pressurises getting these dratted learning history documents right – and indeed getting them done at all. One year in and I've only done two of them. They take a lot of effort.

I think about the learning history workshop and again I find I'm mentally simulating – well not so much simulating as imagining. In addition to the more conventional plans, I imagine working with a storyteller and deliberately creating a mythical story related to say Merton or Nottingham. And then I imagine a Merlin character coming on and telling the story in a short interlude in between conference sessions. Hmmmm. I like it – but it scares me.

In the woods now and the path has levelled out. I notice how teeming with ideas I am and I ruefully reflect on how last Sunday I could barely string a sentence together. What is it with this energy? It comes and goes. I find myself thinking again about these polarities. Between energy and no energy, doubt and conviction. It's like I'm always on a high wire between one place and the next I think – even this life and the end of it. Well I've somehow got to learn to dance on that wire I think – and then I'm back to thinking about risk and fear and wondering is these are going to hold me back?

As I head toward home I wonder what I'll do now. I start to think of this as a micro-choice – wondering if the way I decide this is indicative of other more important research choices I make. Since my MPhil transfer I've been thinking a lot about being more conscious of the choices and decisions I am making so perhaps even this micro-decision of what to do now says something about those processes.

I've got the energy to write in my blog. I could nail the ending to the Nottingham case. I could write in my journal. I could go to bed and listen to the Archers. It doesn't really matter what I do. I think of all the 'decisions' I've made with the research and how many have held (like keeping a blog, a journal) and how many have not (like tracking choices weekly, or reviewing my working title monthly).

Sitting outside now with the warm sun on my cheek I think about theory. I must work up that theory map and work out how to be more discriminating. Discriminating the literature and what it may mean for my research seems quite an interesting thing to do and classification mechanisms start dancing across my mind. I know - I'll go in quickly and write those down. And I quickly finish eating my sandwich and go back inside before I forget to do just that....

And I sit down and write this.....(**End of diary piece**)

Reflecting on the writing of this piece at the time I was amused by how apparently

random my final choice of writing the piece seemed. I had meant to write about theory but the intention evaporated by the time I reached my computer. Reflecting on it now whilst I write this chapter I note that my choices weren't completely random either. The reflective process was rich and was tossing around ideas that eventually did lead to significant action. Later I did work with the local council at Bath. And at the workshop we did include a mythic element though it was not Merlin. The themes and ideas mentioned in the journal piece recurred and deepened throughout the research process though each time they recurred it was as though for the first time. Choices and decisions seemed to result then from ideas that were tossed, turned and thrashed about over time. These ideas were simulated over and again - the actual point of decision-making was not always overt.

This piece really gives a fair sense of what my thought processes were. It represents the experiential dimension to Klein's ideas that helped me gain a greater awareness of my decision-making processes.

Revisiting it again now, with the thesis in draft, I recognise this piece illustrates a difficulty I have been trying to address in the presentation with my storied fragments. It highlights that any account of decisions I claim to have made here must be both true and untrue. True in that actions described throughout did result from decisions carefully made; untrue in the suggestion that at particular points decisions transitioned so clearly into being made. Some did, but by no means all.

The next section will range across to sociotechnical theories. These will offer a whole systems view of change that encompasses context and technology. In this territory the individual is not a rational automaton but a social actor involved in shaping and being shaped by the society in which he/she participates. However this actor will need to again become a faceless one who is described at a distance. This section has set out to illuminate in theory, and a little in practice, what these faceless actors might be like.

The Right Side

Arriving in sociotechnical theory

Whilst I was reading the various organisational literatures, a chance recommendation brought me right across my theory diagram to the field of innovation and sociotechnical theory. The emphasis, tone and purpose of this literature stood in contrast to the other literature I was reading. My brow immediately unfurrowed.

The very first paper I read used sociotechnical theory to consider reasons why two carbon-reducing technologies – gas heat pumps and biogas production from manure – had not been successfully introduced in the Netherlands (Raven and Verbong 2004). In this paper technology was proposed as being embedded in complex human processes that shaped its success or not as the case might be. The breakthrough of low carbon technologies was suggested as a process outside any one actor's control and yet one from which lessons could be learnt. I had parachuted into the territory of sociotechnical theory and I felt as though my feet had landed firmly on the ground! Here the discussion was framed clearly within the context of sustainability; it described change as a complex, uncontrollable process; its view of technology was that it was central, relevant and intertwined with social processes. All this responded well to the struggles with which I had concluded my organisational literature survey.



Parachuting now....

Even now as I write I relive a sense of escape or, put more positively, jubilant homecoming about arriving in this literature. My energy picks up as I write in comparison to the earlier piece on the left hand side of the diagram. I wonder will the reader have felt a deadness in it? I pause and ask myself frankly: was that organisational change literature a complete waste of time? But I have to say no. I don't think I would have known my home if I hadn't been somewhere else.

The Raven and Verbong paper I read represented what I now know to be current sociotechnical theory. This set of ideas has emerged over the past decade from a largely Dutch school of thinkers who have successfully brought together ideas from several streams of literature that discuss technology and its relationship to human society. My

literature survey now started to look at those streams. The sketch below gives a rough idea of where they stand in relation to each other.

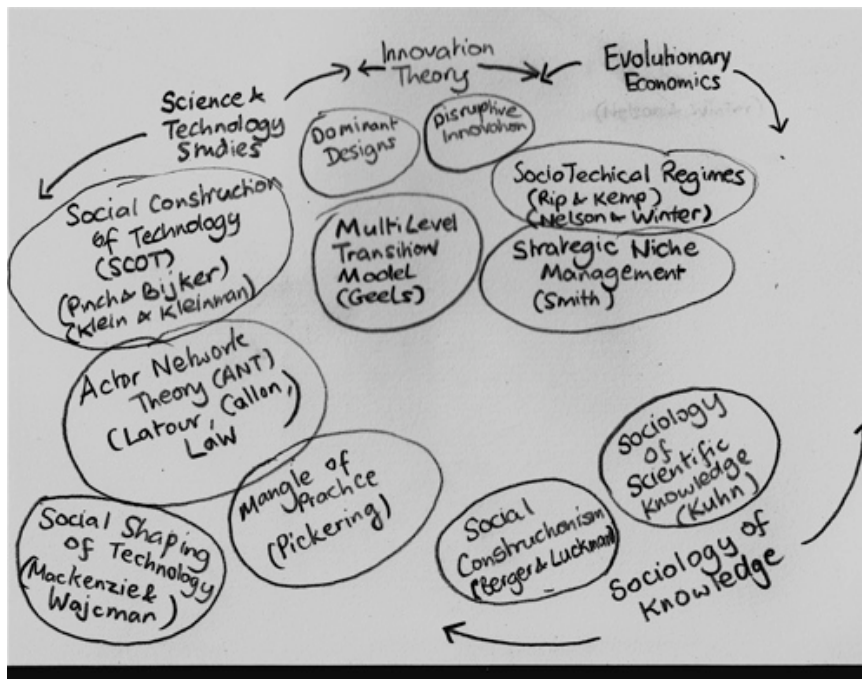


Figure 12: A sketch of some of the sociotechnical theories I covered

This survey centred on the question of how, having accepted technology could not be ignored, might its place in society and its role in processes of change be understood? Technology is a slippery term that is difficult to pin down. To help unpack it I found Rip and Kemp's distinction of four views of technology very helpful (Rip and Kemp 1998):

- (1) as a tool or externalised **object**,
- (2) as a process of production, (**transformer** view)
- (3) as a **symbol** or
- (4) as a key aspect of the **sociotechnical** landscape of society

These views are not mutually exclusive – they blur into each other and apply in different situations. The first three views contribute to a static view of technology whereas the fourth is taking a more dynamic view. By static I do not mean unmoving but rather that is in place already and the first three lenses are concerned then with explaining how it came to be so. I will start with the static view of technology before turning to the dynamic view that is more concerned with how technology shifts and changes rather than with

what fixes it in place.

The static view of technology

Technology is often equated with material concrete things, with edges and substance. It is this very hardness that can lure us into Rip and Kemp's first conceptualisation – the object view. The word technology also carries with it a sense of newness and excitement. After a time, a technology that has been accepted ceases to be technology and becomes an artefact. Yesterday's technology is today's stuff (think of roads, lightbulbs, telephones and bicycles). Life without today's stuff is hard to imagine; it takes on an air of inevitability. Yet this inevitability is illusory. The path-dependent view of economic and technological change accepts that "*historical accidents*" cannot be ignored and allows that "*temporally remote events*" have a part to play in the path that leads to today's stuff (David 1985). Take the now famous example of how keys are arranged on a QWERTY keyboard. This sub-optimal arrangement for typing reflects an earlier need to slow typists down so that their mechanical typewriters would not jam. By the time the mechanics had improved, typists were already trained on QWERTY keyboards and it was too late to shift. The example was used by the economist Paul David to illustrate the idea of 'path dependence' that suggests how each fresh decision narrows the field of possibility (David 1985).

But technology is not always an object like a typewriter. It can manifest as a configuration, an interconnection of many different bits of technology together with a set of engineering and user practices like software and applications. This description fits more with the **transformer** view of technology (2 above): a network of parts that transforms inputs to outputs. At its most complex, such interconnected configurations of technology become large technical systems (LTS) (Mayntz and Hughes 1988). Such systems also become today's stuff; often a mysterious functioning black-box (Rosenberg 1982). In this case black-boxing is an uneasy necessity. The understanding is distributed across so many agencies that no-one has a complete picture of how the inputs are transformed to outputs. Large technical systems

...evolve behind the backs of the system builders, as it were

Joerges quoted in (Rip and Kemp 1998 p.333)

This black-boxing of technology, like the object view is a dangerous shorthand falsely implying that the technology we have is inevitable. This is technological determinism – a view that is insidious because it abdicates a responsibility to reflect on how today's processes are leading to the stuff of tomorrow.

From Science and Technology Studies (STS) come two important sets of ideas that reject technological determinism. The first of these, the Social Construction of Technology (SCOT) framework, puts forward the view that technological development is a highly contingent process. A technological artefact is not inevitable and fixed but represents instead the culmination of ad-hoc processes of negotiations on meaning between groupings with different understandings of what that technology might represent. In a seminal paper, authors Pinch and Bijker first offered a framework for understanding this process (Pinch and Bijker 1984). To illustrate their ideas they described how today's taken-for-granted bicycle was but one artefact from a sea of many possibilities (penny farthings, tricycles, safety low wheelers). Though the penny farthing had at first been much preferred for its speed, the safety low-wheeler ultimately was chosen as a result of the interactions of various **social groupings** (lady cyclists, men of means and nerve...) who were around at that time. These different groupings exhibited **interpretive flexibility** over the purpose of the artefact (transport, sport...) and the problems that need solving (comfort, safety, ..). The variation of the design led eventually, through social processes of **closure** to a point at which the safety bicycle was selected from the variety of different options (Pinch and Bijker 1984). In this way the safety bicycle of that time started to become embedded symbolically as the bike we know today. Closure processes can be explicit or implicit, ad-hoc or time-bound. There is no *best* design in this framework. Echoing the earlier ideas about path-dependence, the key message of SCOT is that

whatever the design that finally results from the process, it could've been different

(Klein and Kleinman 2002 p.29)

Early conceptualisations of SCOT were criticised for failing to place its individuals and social groupings into a social and political context in which structural influences might be

properly reflected. A technological artefact will represent social contexts and power asymmetries of the past that go beyond the original groups involved in its creation (Klein and Kleinman 2002). For example the low-hanging overpasses that we see on Long Island today symbolise past social exclusion. The designer wished to exclude busses - the primary mode of transport for poor people and blacks – from reaching Jones' beach (Winner 1993). Yet when someone looks at these overpasses now it will most likely be in relation to the cultural norms of the present.

So the SCOT framework makes the powerful suggestion that technology is not only symbolic, but it is multiply symbolic over time. Even past the point of 'closure' the meaning of technology will continue to shift in accordance with the times. SCOT looks inside the black box of technology and finds there a reflection of human society. Using SCOT to discuss the modern-day freezer, Shove and Southerton note that it is the symbolic adaptability of this device that has led to its success. A freezer supports many different conflicting modern lifestyles: a financially constrained life (bulk-buying) a time-constrained life (convenience foods) and even an ideologically-led life where organic or locally sourced food can be bought in bulk and frozen (Shove and Southerton 2000). Such symbolic adaptability has helped it embed quickly as part of the 'stuff' of modern life.

by opening up the 'white box' of the freezer we have been able to capture aspects of ordinary consumption which would otherwise have slipped the net. In particular, we have been able to follow the transformation of sociotechnical regimes and systems of consumption and practice from the perspective of one ever-changing device.

(Shove and Southerton 2000 p.316)

The quote above evokes Hughes' well-known metaphor of the 'seamless web' to evoke technology's inseparable relationship with society (Hughes 1986). It suggests too that the fixedness of technology comes not from its hard material edges but from the social processes that fix it in place.

A second important framework of ideas from Science & Technology studies, actor network theory (ANT), looks more closely at those relationships within the seamless web of society and technology. Within SCOT the view of these relationships is human-centric. Technology, though indeterminate, is still presented as the result of human activity rather than having itself a role that might shape that activity. Actor network theory suggests instead that sociotechnical systems are constantly being produced and reproduced by networks of elements that can be material, symbolic or human.

Actor network theory is attributed mainly to the work of Callon, Law and Bruno Latour (Law 1986; Callon 1995; Latour 2005). Actor network theory accepts the differences between the human and non-human elements of the seamless web but doesn't privilege one over the other. Instead it abstracts both onto an equal level where the interactions between them can be considered on the same footing. At the core of this theory is a poststructuralist view that society is, in a sense, an effect generated by patterned, heterogeneous networks of what are sometimes called 'actants' (Law 1992). An actant is a broadening of the notion of 'actor' to include non-humans: machines, materials, ideas, animals or any collection of these. Relationships between actants can be material (e.g. a wire) or semiotic (e.g. symbolic - the idea that freezers provide bulk buying service) or, simultaneously, both. The elements in an actor network are in dynamic tension with each other and when elements change the whole network can change or be reconstituted.

A theory that has the material world interacting with the human world in this way has not surprisingly led to some moral debate and resistance as the sociologist and historian of science Andrew Pickering describes (Pickering 1995). He has redressed some of this controversy by arguing that human agency *is* different from material agency and human intentionality is something that has no analog in the material world. In attempting to capture the semi-symmetrical relationship between human and material agency he describes how they are '*constitutively intertwined*'. Using the metaphor of '*a mangle of practice*' he describes how, in practice, agency moves back and forth between human and machine. (Pickering 1995). Whilst humans have agency though, he argues, technology has affordance. The web then is not woven in all the same silk. Both the Social Construction of Technology (SCOT) and Actor Network Theory (ANT) give a subtle insight into the mutual shaping relationship between the social and the

technical. This section has highlighted how today's technologies - be they artefacts or complex systems - carry within them stratified layerings of human process across time. The implications for this research are significant. SCOT illuminates some of the learning histories where projects such as Kirklees, Barnsley and Southampton might well be framed as examples of how the meaning of what it is to heat a home is being negotiated. And all projects featured in the learning history could well be described as action networks of technology, symbols and people that interact in complex ways over time. The debunking of technological determinism present in both SCOT and ANT implies a responsibility to look closely at how human action and technology are interacting in the present day to produce a sociotechnical future that is anything but determined. Part of the challenge in this research has been to keep a nuanced view of technology on the table so that the social processes under study can be explored in the context of their mutually influencing relationship with technology. This is a recurrent theme in the thesis, one that is discussed in the practical accounts of the workshop (Chapter 5) and the small group work with B&NES (Chapter 12).

The SCOT framework has been critiqued for not going far enough in explaining the processes that lead to the embedding of a technology (Winner 1993). It explains well how an artefact has come into being, but tends after that to revert to a more static '*object*' technology viewpoint. This is not surprising. Though it draws on evolutionary theory, the roots of SCOT lie in the more static traditions of the study of knowledge such as Berger and Luckman's theory of social constructionism (Berger and Luckmann 1967). On the other hand ANT starts to really get inside the seamless web and by considering what action and agency might look like in there it is exploring dynamic effects at the micro-level. However it often lacks a macro view of the broader societal and social structures and how these are interacting over time with agents in the network. The foundations of ANT lie within empirical science and the title of Latour's 1980s book "Science in Action" that first outlined ANT conveys this emphasis (Latour and Biezunski 1987). Perhaps this empirical bias explains why, unlike SCOT, I never did get into a full depth with ANT. Though its ideas were influential I never found myself drawing on them directly whilst writing the learning histories.

In the next section I will look at some of the literature relating to the dynamics of sociotechnical change at a macro level. The roots of these theories lie more in

evolutionary economics a field that underpins innovation studies and sociotechnical theory. From this reading have come some key ideas on which I built the strategy for my research (“The era of ferment”). From it has also come a ‘good enough’ theory of change to describe and underpin the research (diffusion theory). And finally it has led to the Dutch school of sociotechnical theory. These influential and very current set of ideas have guided and been developed in this research.

The dynamic view of technology

If the static view helps to understand technology in terms of what it has become, then the dynamic view is more concerned with technology in terms of how it is continually becoming. The former settles around objects, the latter around processes. The field of evolutionary economics is the school of thought that underpins this dynamic view of sociotechnical change.

Drawing inspiration from Darwin, evolutionary economics sees industrial society as developing in terms of constant processes of variation, selection and adoption among firms, technologies and industries. Its origins go back to the well-known economist Schumpeter who rejected static economic models proposing instead that economic progress relies on a continuous process of technological development that unfolds along trajectories and results in competition between new firms and technologies (Schumpeter and Opie 1934). Through processes of ‘creative destruction’ the weaker firms are weeded out in ways akin to weaker species failing to survive in nature (Scherer and Schumpeter 1984). Also influential in this field are Nelson and Winter who looked closely at the processes of variation and selection (Nelson and Winter 1982). They were the first to propose the importance of cognitive and organisational routines in guiding the trajectory of technological development suggesting that the variation space was limited. They coined the term “*Technological Regime*” to refer to “*a frontier of achievable capabilities*”, defined within certain constraints that lead to “*a broadly defined way of doing things*” (p258). With these ideas, progress is not linearly forward going. It is cyclical with periods of stability and periods of chaotic change and destruction.

And echoing the discussion in the middle section on ‘bounded rationality’, evolutionary

economists also started out with a flat rejection of the rational actor suggesting too that at an organisational level, it is again routines rather than rationality that guide decision-making. The following quote from Nelson illustrates this:

organisational decision processes often display features that seem to defy basic principles of rationality and sometimes border on the bizarre.

(Nelson and Winter 2002 p.29).

These underpinning assumptions of evolutionary economics: first, that change is an unfolding, uncontrollable process of variation and selection; second, that the notion of progress is questionable; and third that human agents and organisations are not rational were at one with the assumptions my reflective literature survey was surfacing. It is not surprising therefore that it was from these sets of ideas that I took some of the key ideas for the research. The first of these, the era of ferment, came from innovation theory.

Innovation studies: The ‘era of ferment’

Innovation theory builds on evolutionary economics with a particular focus on new technology. Its language is militaristic and competitive and oriented particularly around selection: dominant designs are selected and these are ultimately toppled by discontinuities and breakthrough technologies (Utterback and Abernathy 1975). This theory echoes insights from SCOT in its suggestion that the ‘dominant design’ is not necessarily the best design but rather one that is the result of complex social, economic and technical interactions (Clark 1985). The dominant design then sets the forward development within the guiding trajectory of Nelson and Winter’s technological regime. Again this echoes earlier writing about routines and the sense that business as usual can be very entrenched.

Observing several examples of where new technologies had broken through across entirely different industries (e.g. microcomputer, cement and glass) Anderson and Tushman looked more closely at the dynamic nature of these breakthroughs – they called them discontinuities – and considered how these related to ‘dominant designs’ (Anderson and Tushman 1990). In a way they were putting a temporal lens on processes of variation and selection

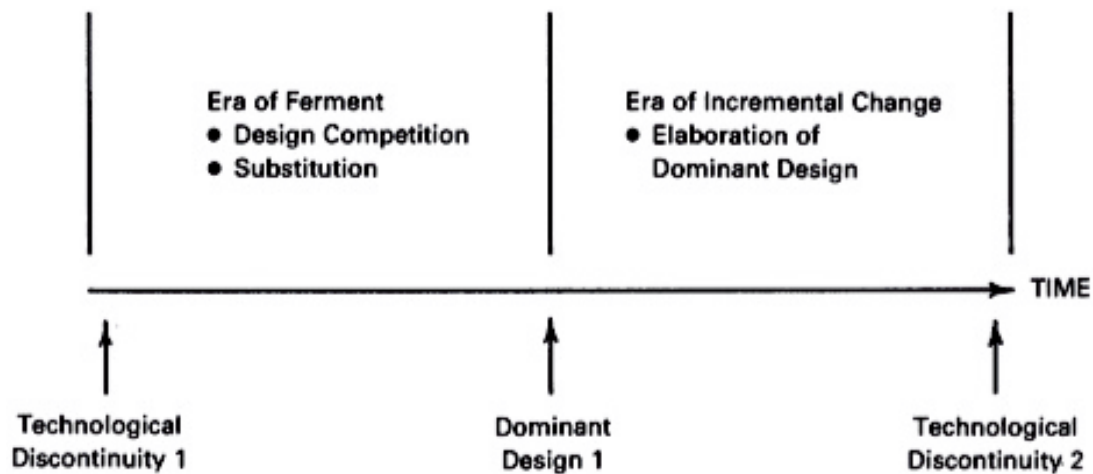


Figure 13: The era of ferment – from (Anderson and Tushman 1990 p.606)

What they proposed was that technological change is indeed an evolutionary process but one with distinct phases that are punctuated by ‘discontinuities’ and ‘dominant designs’. A discontinuity occurs when a new technology emerges that is distinctly different and challenging to the incumbent technology. Influenced by this new breakthrough the field is then thrown into a state of diverse response – what the authors call “the era of ferment”. During this era new variations of the design emerge, new solutions are considered and are in competition to each other. Eventually a new industry standard emerges – a dominant design – that is *not* the original discontinuity but has been informed by it. Subsequently a period of incremental improvement is ushered in.

This was a very technology-centred theory, and yet I found it to have a wider resonance with the ‘big issue’ and the research in general. At the time of reading I’d been in the field gathering potential examples of breakthrough projects. I have written how I kept hearing about the iconic example of Woking Borough Council who, through the use of different low carbon technologies, had slashed their emissions by over 70%. When I went to other sites of innovation in local government they always mentioned Woking. Was Woking then a discontinuity in its way that had ushered local government into “an era of ferment” as to how to respond on the carbon issue?

And even more broadly I wondered if our whole society might be in ferment as the ‘discontinuity’ of our unsustainable way of life becomes ever clearer. Sometimes things

really seemed to be shifting in response. I heard of communities joining together to install solar panels; wind turbines were starting to appear in local DIY stores; woodchip boilers, geothermal heat exchangers and hydropower renewal schemes were increasingly on the radar. And policies were engaging the system too. Recent changes to the Building Regulations in the UK had caused a noticeable upsurge in the use of efficient condensing boilers (Watson, Sauter et al. 2006). And I heard of previously reluctant financiers were now knocking on local authority's doors asking if they can get involved in their district heat and power schemes. The list went on. New policies, business models, community groupings and low carbon technologies seemed to be sloshing around – or was this just wishful thinking? Other environmental campaigners I met felt that nothing was changing⁸. It was still unusual or 'forward looking' to install heat recovery compressors that would pay for themselves in just two years time and would save substantial amounts of energy and money⁹.

Metaphorically at least my sense was that we are a generation, if not in the era of ferment, then poised on the brink of it¹⁰. And practically it seemed to me that local government was indeed springing pockets of innovation. It helped my thinking to call this 'ferment' and to ask how might we act constructively and learn quickly from each other in such a phase. By the end of my first year I had started to title my research "joined up learning in an era of ferment".

The importance of adoption

The 'era of ferment' is not just about variation. Enduring change only occurs via processes of selection and adoption. The Merton learning history split clearly into two acts. The first act described the processes that led to the breakthrough of this new piece of policy. The second described how that idea then started to be adopted across the institutional field. The acts were bridged by this quote:

⁸ this based on formal phonecall discussion with Greenpeace policy adviser

⁹ this based on informal conversation with steam engineer in local playground who told of oil rigs leaving expensive valves that cost £2K / year to run in standby.

¹⁰ I revisit this the day after the UK government put up £500bn in a desperate move to restart the economy – the sense of the credit crunch as a 'discontinuity' is one I would hold and the sense that as a society we are in ferment seems even stronger now.

The introduction of novelty has been studied in great detail. However, the adoption of novelty is decisive for society, not its introduction. Adoption is an active process, and has elements of innovation itself. Individual behaviour, organisations, and society have to rearrange themselves to adopt, and adapt to, innovation. In this sense, the introduction of a new technology is an unstructured social experiment

(Rip and Kemp 1998 p.338)

There is a palpable switch in energy of the ideas with the move from selection to adoption. Adoption shifts away from the excitement of novelty to the mundanity of what that novelty implies. There are uninformed and capricious users, untrained field engineers, unsympathetic regulatory structures. The adoption of novelty relies on how well it can embed in a field that is not naturally set up to receive it. A move to consider the adoption of technology is essential if the dynamics of sociotechnical change are to be fully understood. Yet as the Dutch researchers observed above, adoption has not generally been considered to be part of the innovation process.

The above quote helps place this research within the context of adoption. This work is very much exploring that as an active and innovative process. None of the low carbon technologies described in the later learning histories are brand new. The action centres on the deployment of old technologies in a new socio-economic configuration. A wider argument would be that an over-concern with new technology, exciting though it may be, distracts thinking from the context into which it must fit where these include consumption patterns, user behaviours and deep-seated cultural interpretations of how things are done. The next two sections highlight two theories that relate to adoption and as such underpin the research.

Diffusion theory

The first theory of adoption is a simple and well-known one. Rogers' diffusion theory (Rogers 1962) is an influential sociological theory that describes the mechanisms and patterns observable in how innovations move through society. Starting by studying farming practices in the Midwest of the US Rogers identified different social groupings

that respond to innovations – from early adopters to laggards – and even suggested percentages for their distribution in society. This results in a bell curve pattern – shown in the figure below - that has modelled well the spread of many innovative developments that range from the adoption of products like ketchup, new technologies like Ipods and even ideas like Feminism.

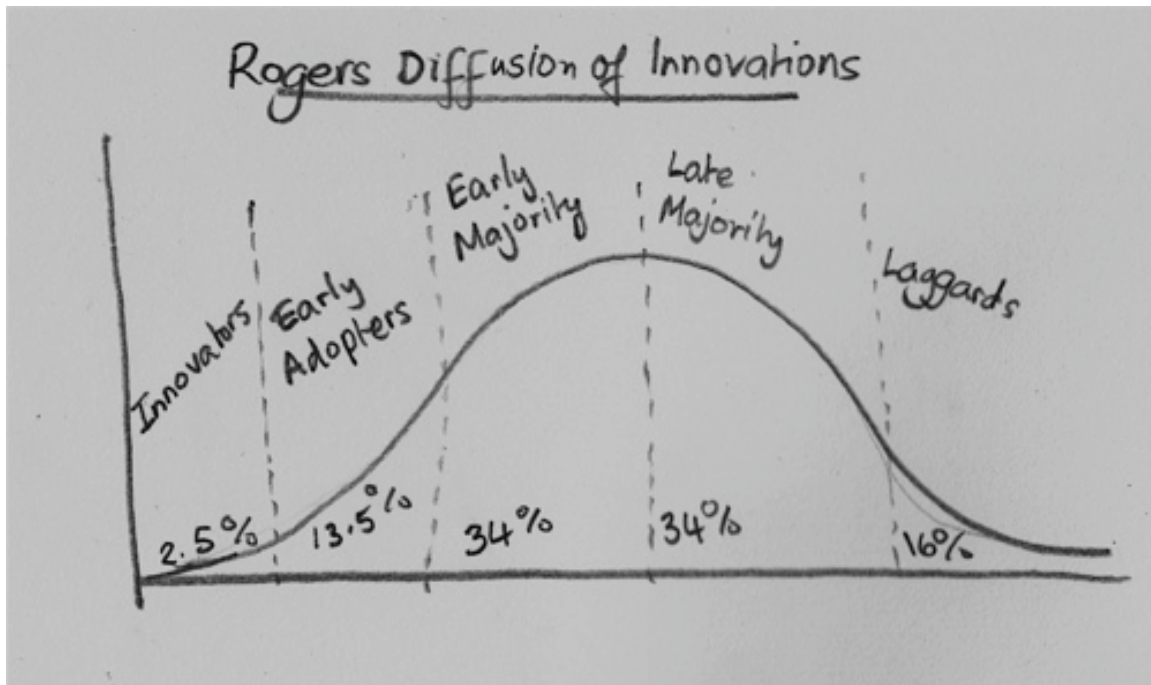


Figure 14 Rogers' diffusion curve

Yet this view is idealised. It sees the innovation as an object that is being cleanly transferred between social groups. It doesn't offer much explanation of failed diffusion or chasms that sometimes appear between constituencies (Moore 1998). Nor does it acknowledge that diffusion of an innovation is a process that itself shapes the technology. From actor network theory, the notion of technology 'translation' has been offered as an alternative to the idea of technology 'transfer' (McMaster, Vidgen et al. 1997). At each stage of technology diffusion, 'translation' of its meaning and use occurs within heterogeneous networks of actants. Such a view is helpful in explaining the messiness of technology adoption and its location within a complex social structure.

Yet it was the very simplicity of Rogers' diffusion graph that made it a powerful theory to use in the research. I found it a helpful way to explain the research to participants. I

would show it –often people were already familiar with some of the terms - and describe the research as a process of trying to speed up “innovation for carbon reductions” from the innovators in the long tail through to the early majority and on. Where the learning history examples of Merton and Nottingham showed how ideas had spread across local authority organisations I applied the theory to enrich the account.

It also helped me to think about the research strategically. I could classify where on the curve I was engaging and why. For instance the February learning history workshop brought mainly early adopters from across local authority together. My B&NES work on the other hand was located, quite deliberately in an early/late majority constituency. Recognising all the time the limitations of this model I still found it very useful to work with and notice now while writing how, in contrast to my earlier wranglings with organisational change theory, I embraced rather than strained against the abstractions.

Bringing it all together: the Dutch school

The final sociotechnical theory is a dynamic one and brings many disparate streams together. Returning to consider my starting question of theory might connect to ‘the big issue’ of climate change:

What does theory say about organisational change processes and innovation for carbon reduction?

My survey had yielded several useful theories: theories to help explain the research, theories to help build a strategy for the research that would be consistent with my emerging view of change and theories that would be illuminated by the learning histories themselves. Mostly these theories were partial and emphasised particular dimensions more than others: for example the collective over the individual; the micro- over the macro, technological over the sociological; or temporally the period of ferment (variation and adoption) over the period of incrementalism (selection). In looking at the question of whole-system’s change of the scale necessary to address climate change, Frank Geels surveyed a wide range of technological and economic literature and noted:

Literature provides bits and pieces which can be used for a more integrative perspective

(Geels 2004b p.20)

The integrative perspective to which he is referring is the sociotechnical approach that has been developed by several, mainly Dutch, scholars over the past decade who have been particularly concerned with the transition to environmental sustainability. Their multi-level transition perspective is the result of a detailed working and integration of ideas from across economics, technology and sociology (Kemp and Soete 1992; Kemp 1994; Rip and Kemp 1998; Geels 2002). The suggestion is that it is through the complex interaction of three levels of sociotechnical activity that transition occurs. These three levels are the regime, the niche and the landscape. I will give an overview of the multi-level perspective now, starting with the concept of the regime.

The multi-level transition perspective

Taking Nelson & Winter's idea of a 'technological regime', Rip and Kemp tightened its grip on trajectories of innovation and change by calling it an underlying rule-set. They also widened it to include a sociological context:

A technological-regime is a grammar or rule-set embedded in a complex of engineering practices, production process technologies, product characteristics, skills and procedures, ways of handling relevant artefacts and persons, ways of defining problems all of them embedded in institutions and infrastructures

(Rip and Kemp 1998 p.340)

This definition was to form the basis for what Geels later would term a sociotechnical regime that he referred to as a:

semi-coherent set of rules carried by different social groups. By providing orientation and co-ordination to the activities of relevant actor groups [they] account for the stability socio-technical configurations

(Geels 2002 p.1260)

Frank Geels' became particularly well known for his compelling visualisation of the multi-level transition model that is shown overleaf on Figure 15. His work had started out by analysing historical sociotechnical transitions such as the shift from sail to steam and the shift from horse-drawn carriage to automobile (Geels 2002; Geels 2005). He drew SCOT and Evolutionary Economics together to paint engaging, complex pictures of how these

major shifts in transportation had come about. In keeping with SCOT, he emphasised the interaction of different social groupings at regime level noting that these were broader than the more engineering-centric definitions of Rip & Kemp whose regime actors were still focussed on the production and use of technology. Geels' meso-level sociotechnical regime brought groupings from different dimensions together (e.g. policy, market, science, technological, cultural...) suggesting that these interlock at an institutional or societal level to create a dynamic stability. On the figure below the sociotechnical regime is the pentagon moving through time in the centre. Each point on the pentagon represents one of these overlapping dimensions.

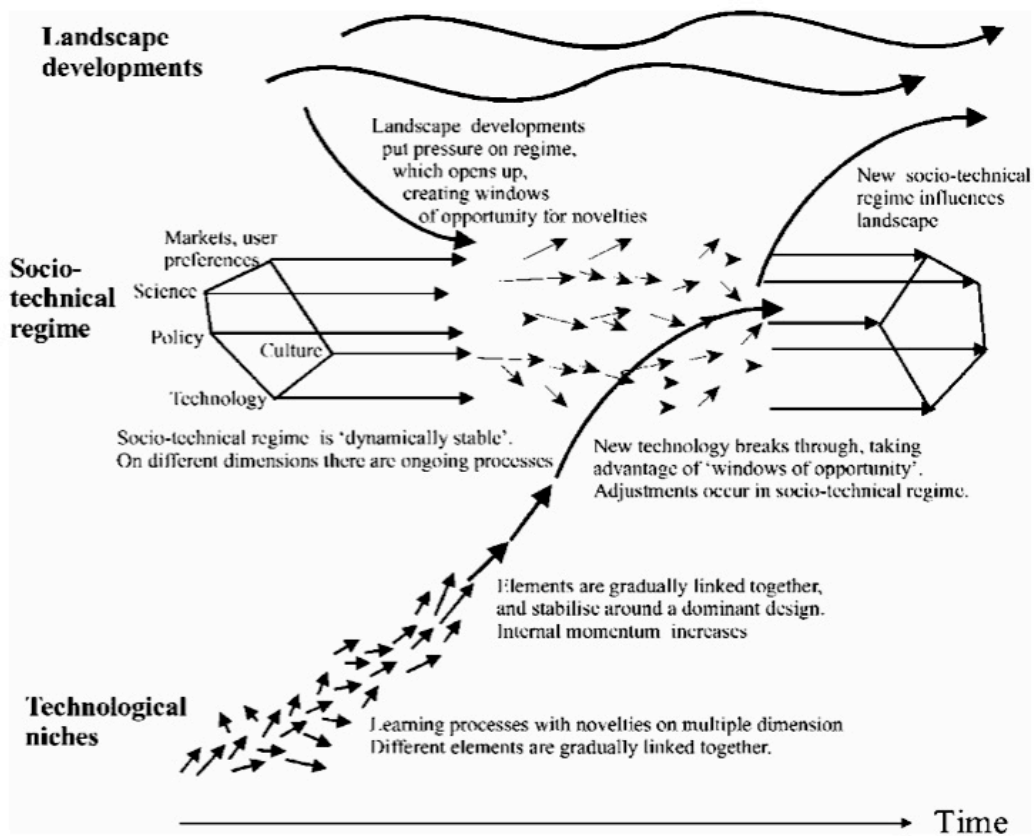


Figure 15 Geels' Multi-level perspective on transitions. Source: (Geels 2005 p.452)

These dynamically stable regimes are then subject to upward pressure from new technological niches. Niches follow ideas from innovation theory. They are the petri-dishes of innovation and as such represent sites of 'ferment' and 'variation' of radical new technologies that then push for 'selection' by the incumbent regime. However the definition of 'niches' has increasingly been broadened in sociotechnical theory to include not only new technologies but also new rules and the necessary re-configurations of the

social groupings (suppliers, producers, users etc.) that these imply. A part of sociotechnical theory, strategic niche management, has particularly looked at how social processes within these niches might be cultivated in a way that supports their breakthrough in the regime (Kemp, Rip et al. 2001; Smith 2004). The titling of the 'niche' as technological is unfortunate as it represents a lapse back into a technologically centric language and is inconsistent with Geels and Schot's more recent sociotechnical definition of what happens in the niche:

Both niches and regimes have the character of organisational fields (community of interacting groups). For regimes, the communities are large and stable, while for niches they are small and unstable. Both niche and regime communities share certain rules that coordinate action. For regimes these rules are stable and well articulated; for niche innovations, they are unstable and 'in the making'.

(Geels and Schot 2007 p.402)

The multi-level model, as visualised by Geels, sees niches nested within regimes and these in turn are nested within a slower-moving sociotechnical landscape. The landscape might be likened to the macro actor network that fulfils societal needs. It includes material things like road networks and cities, but it also includes cultural, macro-political and economic ideas like growth, oil prices and democracy that have deep-seated symbolic meaning in our society. The landscape has been described by Geels and Schot as:

the exogenous environment beyond the direct influence of niche and regime actors (macro-economics, deep cultural patterns, macro-political developments). Changes at this level take place slowly (decades)

(Geels and Schot 2007 p.402)

The landscape exerts pressure on the regime over time. Describing dynamics very similar to those described in Gersick's theory of punctuated equilibrium, the Dutch sociotechnical school proposes that a sociotechnical transition occurs when changes in

landscape exert pressure downwards on a sociotechnical regime in tandem with upward pressure from increasingly competitive niche innovations. This instability creates windows of opportunity for niche innovations to start to breakthrough into the regime where realignment of the existing regime is then forced to occur. What is important to recognise is that in this model, all three levels are in a state of flux though the rate of change is different at each level. Niches do not break into static sociotechnical regimes. Rather they are reinforced by an alignment of pressures and timescales in the regime and landscape:

It is the alignment of developments (successful processes within the niche reinforced by changes at regime level and at the level of the sociotechnical landscape) which determines if a regime shift will occur

Kemp quoted in (Geels 2002 p.1261)

Inquiring into Geels

I found the multi-level perspective in general and Geels' diagram in particular immediately appealing. It offered a theory of transition that linked closely to my work and to the purposes of the project. It managed to answer many concerns I had with other theories too. We started discussing it on the project and colleagues found it similarly engaging. Gradually it became quite a central theory. We started to question it, to apply in our work and to inquire into it. On the project we were questioning the role of theory in general. And I found myself particularly looking at Geels – his name came to represent this theory for me. I started gathering critiques from within the project and outside of it. I noticed quickly just how much influence it had.

It had been the underpinning theory of a UK ESRC program: “The Sustainable Technologies Program (STP)” that was just completing as Lowcarbonworks started. I attended their dissemination seminar in December 2006 and enjoyed the lively discussion about the model – its benefits and its shortcomings. At about the same time I contacted a British academic Adrian Smith from STP who had been looking at how these ideas were or might be applied in practice to policy-making (Smith 2004; Smith and Kern 2007). When we spoke he shared his own questions about these ideas. In 2007, Tim Foxon, also from STP visited Bath and gave a seminar to a large audience to present his perspective on how transition pathways to a low carbon future within a Geels framework

might be created (Foxon, Hammond et al. 2008). This presentation of Geels raised yet more questions and critiques to add to the comments and questions I already had. These are summarised in the table below:

Nr	Critique
1	Doesn't explain everything – for example sudden ideas driven change e.g. liberalisation of markets under Thatcher; French push for Nuclear power
2	There is a connotation that new is 'good' and 'old' is bad
3	It is too uni-directional with the influence moving from niche to landscape. What about forces of influence in the other direction
4	The Niche is overly characterised as technological when it should overtly include the incubation of new social, biological and ecological practices
5	The model itself serves a particular 'regime of thought'. The notion of one dominant regime is itself a way of thinking. What about pluralities?
6	It is too functionalistic – there is a neglect of the micro level of individual agency
7	The nesting of levels makes clarity difficult: a regime shift at one level might be incremental at another
8	It is hard to understand. When we show it to research participants they don't get it – it is quite abstract.
9	Across the model the action takes place at the socially constructed level. It obscures our natural world.

Figure 16 A summary of various critiques and questions stimulated by the Geels model

As the table above shows, the critiques I gathered were varied. Some challenged its scope and explanatory power. For example critiques 1,6,7,8 suggest it doesn't explain certain things well implying that the model might need to be expanded and/or improved upon. Other critiques were more fundamental, see for example critique 5 that questions the use of this kind of meta-theoretical model altogether. I will not reflect in detail here on these critiques but will return to them later. Here they are introduced, much as they were to me, quite early in my thinking. The overall effect of this early inquiry cycle into Geels was to temper my embrace of the theory and make me more ready to recognise its limits. I continued to work with Geels but did so carrying quite a demanding question as to what was the use of it. I continued to think about how it might be developed but also to

notice where it might better be put aside. This then was a question of purpose. In Chapter 13, with the benefit of the research process, I will revisit Geels. I will reflect then on these critiques and this question of purpose.

One further thread of inquiry resulted from this engagement with these ideas. It related to the final critique listed in the table namely that the model seemed to have no place in it for the natural world. The next section will describe this inquiry and show how it raised an important question for me.

Geels and the natural world

In mid-September 2007 the Lowcarbonworks action researchers met to discuss theory. It was in this meeting that we first discussed how Geels' model seemed to be located exclusively in a socio-economic-technical world. That no direct mention was made of the natural world seemed ironic to us considering that the transition that this model is trying to explain is one to a more sustainable world. The most obvious absence was in the definition of the landscape where societal needs are described as being fulfilled by its material culture with no mention being made of the services supplied to us by our ecosystems.

the linkages between elements necessary to fulfill societal functions

(Geels 2004a p.900)

Elements in this landscape particularly relate to transport and energy needs and are described as comprising our road systems and energy networks together with the social fabric and deeper cultural patterns that fix such networks in place (Geels 2002). There is no mention of the services of our ecosystem: the natural world is at a step removed.

In a later 2007 paper Geels and Schot start to make reference to this abstraction:

Philosophers see modern man living in a 'technotope' rather than a
'biotope'

(Geels and Schot 2007 p.403)

But they seem to accept our technotopic landscape as inevitable supporting the view of:

Rip and Kemp [who] saw sociotechnical landscapes as something we can travel through and metaphorically and as something that we are part of, that sustains us....[] the technical, physical and material backdrop that sustains society

p.403

Though it sustains us it only does so in a sociotechnical way. Again no mention of our habitats, climate systems, the forests, the oceans, and the air we breathe. The natural world is referred to only by analogy. Static elements of this sociotechnical landscape are likened to static elements of the natural world:

soil conditions, rivers, lakes and mountains in biological evolution

p403

And similarly, when responding to critiques that the sociotechnical landscape is not always as slow moving as originally proposed, Geels and Schot make analogies to the climate. Again in their 2007 paper they start to explore the dynamic effects – sudden war, fluctuating oil prices, the credit crunch, the fall of communism - that have hitherto not been accounted for at the landscape level (Geels and Schot 2007). These sudden occurrences they liken to the weather. They are like

rainfall patterns, storms and lightning

p.403

Though it is like them it is interesting to note that the weather itself appears to have no actual place in this technotopic landscape.

Eco-blindness and evolution

I remember voicing a chilling question that surfaced for me during that project meeting that was to remain significant for me. My question was: if we were talking about evolutionary change in the context of a constructed socio-economic world – where things like ‘bank account’, ‘career appraisal’ and ‘the economy’ seem realer to us than the earth we stand on – then didn’t that imply that any transition we might hope to evolve would be in relation to these constructs rather than to our natural world? If that was the case the

whole notion of a sociotechnical transition was just another constructed wheeze. Whereas before I held a gentle assumption that evolution was not necessarily always progressive, my thinking now was becoming more depressive. Maybe we humans just don't have it in us to evolve in tune with our natural world – at least at this stage.

*“Let me get it right, what if we got it wrong
what if we weakened ourselves getting strong
what if we found in the ground a vial of proof
what if the foundations missed a vital truth”*

Lemn Sissay¹¹, Poet

I called this eco-blindness and took the depressing idea of it away with me. I wrote about it in my blog¹². I noticed it in myself. One day not long after the meeting I was driving quickly to be on time for a medical appointment in nearby Bristol. On the radio was a conversation about how CO₂ emissions could be greatly reduced if people dropped their motorway speed by a certain amount. I remember listening to this, mentally pausing, but not dropping my speed, feeling uncomfortable and noticing that too. All this was going on as I continued speeding along, eco-blindly to the appointment.

My questioning as to how I might take action when I hold a systemic, evolutionary view of change was tinged now with deeper questions over where the evolutionary process itself was taking us. And with the current financial meltdown and celebrations of Darwin it seems to me these questions are around more than ever as the short verse by Lemn Sissay that I have included above might illustrate. A new perspective on what it is like to be acting within an evolutionary process of change is what the learning histories are essentially exploring. And at the end of the thesis I will return, in quite a personal way, to the question of what meaningful action might look like within that when the outcome cannot be known and progress is not assured.

¹¹ Broadcast on 9th Feb, 2009 on Channel 4 as part of the Darwin 200th birthday short films.

¹² http://academicmum.typepad.com/academic_mum/2007/09/ecoblind-stick-.html

Concluding

This chapter has covered a lot of ground. The ideas of 'change' and 'technology' have been discussed as they appear in the related literature. As they are such broad terms, the survey has itself been broad and has ranged from micro-detail of individual decision-making to macro-level sociotechnical change. Theories and concepts have been explored that formed a basis for the learning history work as well as the overall positioning of my research as an experiment in facilitating 'change' at a systems level.

By noting my reactions and following my rejections of aspects of organisational change theory I gradually started to tease out my view of change as 'visionary' rather than 'logical'. By contrast, my enthusiastic embrace of sociotechnical theories helped me further articulate my position on change as being an evolutionary one where actors within that it are non-rational, naturalistic intelligences subject to getting fixed in entrained patterns of thought. The 'visionary' view of change links directly to the narrative approach of learning history which, as the next chapter will describe, recounts change as a story of messy human endeavour with highs and lows and unknowable outcomes.

By exploring the literature around 'technology' in a social context I noted tendencies, even in this literature, to collapse into a view of technology as a separate and immutable object once it has emerged. This concentration on selection with a particular focus in the innovation literature on 'newness' helped me to better identify the territory of this research as relatively fresh. This territory is concentrating on the adoption and reconfiguration of existing technologies rather than on the emergence of new ones. The contention is that there is much innovative work to be done and it is here I am hoping to contribute.

Finally the chapter culminated appropriately with a discussion of Geels' model of sociotechnical transition that brings many of the disparate streams of theory together. As such it is an important and currently influential model of system's change and one that is very relevant in this research. A first cycle of inquiry into this theory resulted in a loosening of my embrace of this theory and this lays the ground for a deeper discussion in Chapter 13. Again the discussion of Geels lays the ground open for narrative which

zooms into this abstracted evolutionary theory of transition, puts faces on the actors and describes what change is like for them. This cycle also raised some more deep-seated questions as to how I might live and work meaningfully with the view of change that I have been discussing and these questions will be taken up again at the end of the thesis in Chapter 14. In this way the role of theory and its relationship to the purpose of this research is being explored ever more deeply.

A final reflection



Figure 17: Rough Sketch of Theory points used in Merton

Fletcher's posthero has been 'disappeared' from the narrative



On the disappearing dynamic.....

More deeply I reflect on how masculine a place I have been. Apart from Connie Gersick and Elizabeth Shove, all the writers I have quoted are, I think, men. The sociotechnical world is undoubtedly masculine. It feels quite familiar to me from my engineering days. But my feminist funny bone is tickled – in an unfunny way - at the end of a piece like this. What about Fletcher and her paradox of 'postheroic' leadership? Fletcher's postheroic paradox comes from noting first how the new thinking on leadership increasingly reject the notion of a single prime mover (hero) acting on the back of his (yes his for they are masculine) special qualities. This new postheroic leadership is defined instead by networks rather than

individuals and the qualities it calls for increasingly demand relational skill; however, and this is Fletcher's main argument, the gendered nature of the workplace has been overlooked in such writing (Fletcher 2004). Its tendency to re-privatise the feminine will tend to disappear those very skills that are theoretically valued as postheroic. The idea of postheroic leadership as something inherently feminine is something I carried into the work and was with me the whole way through – how come it got bumped out of this chapter? Ironic really considering Fletcher's relational practice is all about the tendency to 'disappear' skills and practices associated with the feminine: team work, empathetic communication, collaborative working and so on (Fletcher 1999). Some of my work has intuitively been oriented at inquiring into who and what postheroism might look like and how might I help it to 're-appear'.

This final reflection refers to what is important but has not been covered in this chapter. It is deliberately presented on the limb of a reflection. It has to do with the tendency to make things disappear and introduces the notion of postheroism which was mentioned in the Merton learning history. These perspectives on what can be 'disappeared' from even the most thorough exploration have become increasingly important both for this thesis and the Lowcarbonworks project as a whole. The reader will find this thread running through the thesis; it will be revisited more fully in Chapter 14.

4. Questions of Method

The Merton learning history that opened the main body of the thesis is an illustration of method. The introductory pages directly explain some of that method: learning history is distinguished from case analysis; the process of crafting the history from interview is outlined; the relationship of one history to the overall series is explained. On the other hand a reader might cast it down and say ‘this is one person’s story, with a bit of commentary and analysis alongside, so what!’ The Merton history is as light as the story it tells and yet it is heavy with the decisions that the telling of that story implies.

This chapter aims to unpack the many decisions that tether the Merton learning history to a method and explains where that method sits and why. This chapter will address questions of method like: Why learning history firstly? How does this approach link to the purposes of ‘accelerating learning about carbon reduction in an era of ferment’? What kind of learning history is this? How does it relate to other incarnations? What new proposals are there here with respect to method? And, if there is a new proposal on method, how might I know it is a good one?

This thesis does propose that by intertwining action research processes of inquiry and participation with learning history, new methodological ground has been covered that is timely with respect to the ‘era of ferment’ we are in. The approach of “learning history in an open system” is proposed to be a methodological development and it is explored in relation to the literature on learning history and action research and in relation to the narrative ideas it draws in.

First I will introduce the overall orientation within which this research sits: action research.

Research Orientation: Action Research

In this section I introduce action research and I will highlight the areas that are particularly relevant for this research. This section is mainly one of laying ground and priming it for later discussions.

First the ground. Action research is primarily concerned with addressing issues of practical concern and its emphasis is the field of experience. Its purpose is to carry through a change of practice that is:

seeking to address issues of significance concerning the flourishing of human persons, their communities and the wider ecology in which we participate

(Reason and Bradbury 2008b p.4)

Unlike more traditional forms of social research there are no research subjects. Rather the action researcher embeds herself in a field of inquiry and engages with those there on an equal footing. Research participants are co-researchers. The creation of new learning and practical knowledge that remains in the field with the co-researchers is for the goal of the research. This is valued equally if not above the extraction of data from which later academic theorisation might occur.

The practice of action research is concerned with tackling the disconnection between the world of ideas and the world of practice and experience. It is not to be mistaken however for a box of tools and methods. It is an '*orientation to inquiry*' (Reason 2006 p.xxi). Because of its practical orientation, its emphasis on participation and its unashamed value driven agenda to make the world a better place, it

challenges much received wisdom in academia [and among social change and development practitioners] '

(Reason and Bradbury 2008b p.1)

The challenge is both an ideological and a practical one. Some of its fundamental principles mean that the practice of action research can seem counter-cultural when compared with other forms of social research.

One such principle is the extended epistemology introduced briefly in Chapter 1. In action research the way of knowing that is normally associated with academia - knowing through thinking and ideas (propositional knowing) is no more important than other kinds of knowing (presentational, experiential and practical knowing). That many ways of knowing are valued on an equal footing in action research is consistent with its practical and experiential orientation. What a commitment to this in practice means is that research evidence and research reports alike will dwell on forms of knowing traditionally not seen or valued in academia.

A second counter-cultural principle of action research is emergence. In other words the practice of action research is understood to be an ongoing, unfolding process that cannot be controlled in the manner of a traditional field experiment. One might argue with the suggestion that any field experiment can be controlled and some qualitative research approaches do just this. The point here though is not to describe the argument but to point out that when conducting action research, there is not even an attempt or an aspiration to control. So it is research that is oriented at working with change rather than avoiding it. The researcher's participative position within the field puts her at the mercy of its vagaries. This understanding of research as something that

Changes and develops as those engaged deepen their understanding of the issues to be addressed and develop their capacity as co-inquirers both individually and collectively

(Reason and Bradbury 2008b p.4)

is completely counter to the notion of research as a process of finding something out. The researcher works rhythmically and iteratively rather than in a straight line toward a destination. Research moves forward in cycles of action and reflection (Reason 1999) deepening and shifting questions as it goes. This has, as I will describe later, implications for the practice of the research as well as how its quality might be assessed.

'Emergence' and 'many ways of knowing' are two of a number of principles that guide the practice of action research that by definition is a varied, personal and context-dependent process. The embedded nature of the research in the system implies a

layering of the various practices of action research that range from the individual researcher to her co-researchers and on to the wider field in which she is engaged. Distinguishing first-, second- and third- person practices of action research is one helpful way to organise a description of these different layers and one I draw on a lot to describe what I have been doing.

At the level of first-person the researcher is concerned with cultivating an inquiring approach to her own life where this implies an ability:

to act choicefully and with awareness and to assess effects in the outside world while acting

(Reason and Bradbury 2008b p.6)

It is the foundational discipline for the researcher (Mead and Marshall 2005) and it is personal. The inquirer cultivates a practice that supports her own rhythm of deepening and developing questions through cycles of action and reflection. There are lots of approaches and practices that support the development of this personal discipline. For example the 'Ladder of Inference' aids offline reflection and analysis of practice (Rudolph, Taylor et al. 2001); Torbert's four parts of speech help with good communication that the inquirer can practice and reflect on. Likewise his four territories of experience helps the inquirer notice how actions are congruent (or not) with intention (Torbert 2001). More practically even, day-to-day disciplines like journaling, freefall writing, woodland walks and even brushing one's teeth with the wrong hand all make up a set of practices oriented at helping the researcher to see beyond her everyday patterns and assumptions of how the world is. In this way she might reach those important edges of her practice, indeed her whole being, where learning and development can occur. The foundational discipline of inquiry that I brought into this work was cultivated during my MSc. At that time I observed in detail how I moved from questions, to actions, to reflections and on to sometimes nothing at all. In this way I teased out the rhythms of my personal way of doing inquiry. This I took into and evolved over the course of this PhD. I will not explicitly describe it here hoping instead to show it in action through the dissertation.

These reflective practices, termed first-person inquiry (Torbert 2001), are encouraged,

not solely as an end in themselves, but as a foundation for second-person inquiries where groups come together to '*inquire into issues of mutual concern*' (Reason and Bradbury 2006 p.xxv). Such second-person inquiries range from informal face-to-face conversations to the more formal approaches where an inquiry group is explicitly convened and follows a particular format of inquiry of which co-operative Inquiry (Heron and Reason 2001) is perhaps the best known example. A common aspiration in these second-person encounters is the opening of a '*formation of a communicative space*' (Kemmis 2001 p.100) where dialogue and mutual learning can flourish. Several sites of second-person inquiry are described in this thesis. These range from informal conversations, to semi-structured interviews through to workshop events. Alongside the general methodological exploration of how second-person action research approaches can strengthen learning history has run a question for me of the role of the researcher in these second-person encounters. On my MSc I had run a co-operative inquiry into a subject that was important to me – meaningful work. I had struggled then with resolving my multiple roles of facilitator and co-researcher. I had concluded that cycle of research with a desire to explore second person approaches where researchers and participants were equal but took explicitly different roles. I think this led me to embrace the insider/outsider nature of learning history research.

Finally there is third-person inquiry. As already mentioned, action research is unapologetically values driven, seeking to create '*world worthy of human aspiration*' (Reason and Bradbury 2001 p.1). Levels of inquiry are as Reason & Marshall put it '*for me, for us and for them*' (Marshall and Reason 1987). Third-person inquiry concerns itself with the '*for them*', asking how the scope of second person inquiries can have an impact on unknown others in the wider system, in the service of '*the flourishing of individual persons and their communities*' (Reason and Bradbury 2001 p.1). It is the open end of second-person action research. It includes ongoing conversations, encounters and action that connect to that research but are impersonal and unknown because they are in the wider system and do not occur face-to-face with the research.

The question of how third-person research might build on second-person research to effect change is very relevant to the discussion here. I have been concerned with learning occurring within a field of organisations rather than at a local level. And in Chapter 1 I set out an aspiration to find some way to address 'the big issue' of climate

change. This aspiration fits well with the third-person realm of inquiry which seeks to build from a scientific happening a 'political event' (Toulmin and Gustavsen 1996).

Here I have laid out the ground of action research. Before moving into learning history, I want to prime it by picking out three areas of action research where this work has been actively inquiring rather than simply drawing in lessons. These areas are: first, the relationships between first-, second- and third- person practice in addressing big issues – and in particular the direction in which those links are made; second, the question of achieving scope in action research; and third the role of modernity in action research which is a field that is largely built on ideas of postmodernism and a socially constructed view of knowledge.

Inquiry area 1: the direction of inquiry

I have been exercised the whole way through this PhD on the relationship between first-, second- and third-person inquiry and how much attention to give to first-person issues. By attention I mean two things here: there is the actual energy I devote to first-person inquiries and then there is the time I spend discussing them in the second-person realm: for example with others or even in this thesis. So there are questions of practice and of privatisation.

On the one hand I agree that first-person inquiry is the foundational practice. Every decision I make, every question I form relies on it. And many of the challenges I've faced over the duration of the research have had at their source personal edges – for example fear or ego – with which I have had to work. On the other hand, from the outset, I felt impelled not to start with my first-person practice for fear I might never leave that realm and so fail to reach the question of how my practices might link to the 'big issue' at the heart of this research. So from quite early on I had questions around the direction of my inquiry, its centre of gravity and the way the different levels of inquiry might be tuned into each other.

Regarding this tuning, the previously mentioned levels of inquiry of 'for me', 'for us' and 'for them' are sometimes drawn as a series of concentric circles in order to suggest a necessary congruence of purpose (Marshall and Reason 1987; Mead 2001).



Figure 18 Nested levels of inquiry

To explain the implications of this with respect to how I address inquiry in this thesis, now imagine taking the traditional picture of inquiry in the figure above and opening it up like a telescope and turning it to the side as I show below.

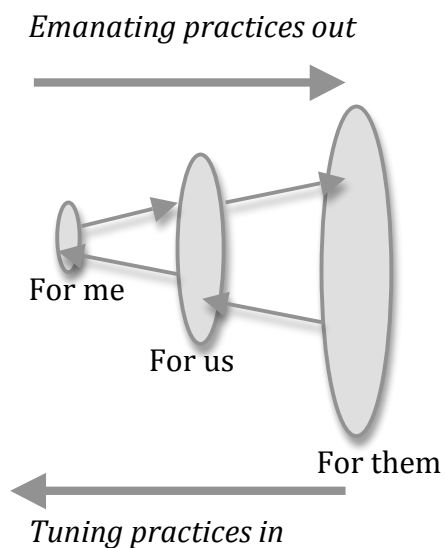


Figure 19 Telescopic view of inquiry

The telescopic view helps me to look more closely at the linkage of purpose between the different levels of inquiry. It also suggests different orientations and possibilities for positioning a piece of action research. At CARPP the centre of gravity of inquiry often lies in the first-person. Many researchers at CARPP are professional practitioners in education, health and the public service. As such they start with the necessary question of who they are in their field and this moves to questions of how they might develop their

way of being in the world. See for example the work of Kathleen King, Sue Porter and Chris Seely (King 2004; Porter 2004; Seely 2007). Links to the second- and third- person realms are often made but the point to note is that the flow of inquiry is emanating outwards from the foundational questions of the first-person rather than the other way around. Not all action research is done this way, but this CARPP context is important to explain that I felt a little controversial at first when I said I wanted to work into the first-person rather than out from it.

With my interpretation inquiries are no longer flowing in one direction but are balanced in both directions. Inquiries do still emanate outwards, but they also are tuning into the needs, questions of first the 'world' of which we are a part and second of the 'communities' to which we belong.

In this work I am locating my start point at the 'outward' face of the third person and working back to the first person from there. The question is not so much about scaling up new practices but rather how to tune my practices in. To draw on my old field of electronics, it is resonance rather than amplification I have sought. I judged first-person inquiries worthy of attention when they influenced my broader inquiry in some way. An example would be that my fear of public speaking stood to impede the goals of the research so I worked with this fear. This is a little different to working out from the first-person. I have tried to bump into rather than start with my first-person questions. This approach is in evidence in how I present the research back to you. I am present in this account, many of my reflections in this thesis on how to be a learning historian are personally toned - but I aim to show you the 'relevant' rather than the 'whole' me. And in terms of what I choose to describe, the 'outward' facing inquiry might get more airtime than the details of my personal struggles and learning. Some will be privatised. There have naturally been some new challenges to working in this way. Later, in Chapter 14 I will reflect on some of old chasms between the political and the personal that started to open up for me. But I sense that it is here there is much practical action research work to be done if we quite purposefully face into the big issues of our times and see what implications that has for our practice. This approach is intended to complement rather than to undermine the first-person focus of other CARPP accounts.

Inquiry area 2: the question of scope

The second area of inquiry in the field of action research relates directly to the first. It is looking at the question of widening the scope of action research. This question plays into a recent self-critical debate among leading action researchers who have been asking how action research might achieve wider influence in policy and in effecting large scale changes that are more in keeping with its ambitions and moral position (Reason and Bradbury 2008a). Davydd Greenwood started this debate and observed that one reason for action research's lack of practical clout is in fact its pre-occupation with proving its own moral and epistemological superiority (Greenwood 2002). Bjorn Gustavsen likens this to a survey researcher endlessly justifying the basis for his survey but who in the end never gets around to actually conduct it (Gustavsen 2003). His remark amounts to a call to action researchers for '*more action, less talk*'. But in the same paper his main reasoning as to why action researchers achieve marginal influence is not down to inaction but rather the confinement of that action to a localised level. This is a strong argument. Much of action research shuns the traditional path from research to policy which involves data collection, interpretation, generalisation, theorisation and ultimately policy guidance. As a result, the route to influence is seen to lie in the field within which action research has been located.

Influence can be reclaimed in a number of ways. Firstly by taking a systemic view it can be argued that if change in the field is the primary purpose of the research then this change is carried forwards and outwards by participants. Second it can be argued that generalisation does occur from action research work. It just occurs differently. Though often particular to one situation, the argument goes, the 'surface detail' of an action research account will work at the level of 'structure' and so allows others to make links to different situations (Winter 2002). In other words generalisation occurs not at the point of writing but at the point of reading. However this refers largely to achieving influence on other action researchers rather than on impacting those policymakers or change agents in the field who expect outcomes and guidance from research rather than stories. Neither argument can escape the challenge that much of action research is limited to a bounded set of actors involved in a localised single case of circumstance. Gustavsen finds himself wondering how to '*transcend the single case without losing the action element along the road*' (Gustavsen 2003 p.95) and concludes that the answer

lies not in creating a set of several distinct cases but rather in the creation of a series of inter-related happenings. He calls this a social movement where such a movement:

is a series of events that are linked to each other and where the meaning and construction of each event is part of a broader stream of events and not a self-sufficient element in an aggregate.

(Gustavsen 2003 p.96-97)

Gustavsen's own work with action research groups on a national scale in Norway and run over decades is one articulation of this building of a social movement. In this work he paid particular attention to working in a distributive way and noted that when doing action research this way:

it becomes more important to create many events of low intensity and diffuse boundaries than fewer events that correspond to the classical notion of a "case"...

(Gustavsen 2003 p.96-97).

In this research I have been exploring work at the systems level that is very much in the spirit of movement building. The resource and longevity of my research project is on a much smaller scale than the projects described by Gustavsen: I cannot hope to build a social movement. However the way I have been linking events with a certain coherence and a third-person focus has relevance. It is akin to creating a systemic happening that might connect to and lend energy to an existing forward-going sustaining movement. A flutter perhaps? My position does differ slightly from Gustavsen's view of achieving scale not purely on the basis of practicality. His social movement building research bases itself on the evolutionary notion that from several events will eventually come new practices and movements for change. As such the many events are sprinkled like seeds in the hope that some will grow and the researcher is distant from the events themselves. In my work there are of course many fewer events, but also my attention as a researcher is very concerned with cultivating something new within these events. The next chapter in particular will describe one such event – the learning history workshop – where I tried to cultivate something new. Similarly in my small group work with B&NES I also was attempting to cultivate something new. This work then is somewhere between the detail

of the single case and the sprinkling approach of the social movement and this has implications for the practice that is described.

Finally, this thesis also explores the possibility of my research achieving a broader scope through the kind of theorisation and analysis that is more typical of conventional research. This neatly leads to the final area of inquiry within action research that is being touched upon here: namely finding a place for some more modernist ideas and methods that might be useful but that have hitherto been shunned by many action researchers.

Inquiry area 3: including elements of modernity

As a former engineer my entrée into action research at the far end of qualitative social science research presented me with some surprises. Having embraced logic and reason for much of my life, I found that many of the societal problems we face today seemed to have originated with Descartes. Put simplistically: from his rationalism had come science, and from science had come the industrial revolution and our modern world. In order to re-imagine a new world, positivism with its rational thought and reductionist ways needed to be put aside. To put it gently, modernity had '*outlived its usefulness*' or more strongly, had a cost of '*ecological devastation... social fragmentation and spiritual impoverishment*' (Reason and Bradbury 2001 p.4). I had no argument with this view. The postmodern way of thinking with its rejection of grand narrative and its celebration of multiplicity felt quite natural to me. I had always held a very ambivalent, uncategoric view of reality. And countering the commonly held view that all scientists must be relentless positivists, I felt that my scientific background seemed to play perfectly with postmodernism. I knew from my microprocessor design days that none of the many models I used were reality. They were forever destined to be just one of many incomplete representations of it.

Neither did I struggle with the socially constructed view of knowledge that has a strong 'kinship' with action research (Gergen and Gergen 2008). Social constructionism proposes that our knowledge of the world is mediated through constructed meanings that are created through cultural and social process. What appears to be fixed in reality is in fact mediated construct. And nowhere more so than in science where the very building blocks of matter - sub-atomic particles – can convincingly be shown to be themselves social constructions (Pickering 1995). The socially constructed view is essential, as the theory chapter showed, for a nuanced discussion of technology.

The socially constructed view has implications too for action which are relevant to later discussions of human agency in the face of 'big issues' such as climate change. A collectively constructed view of reality plays well with the structuralist view that a human's action and beliefs will be shaped by the constructions of the system to which he/she belongs. This naturally raises a question over how much free will a person actually has. Indeed Foucault would answer very little. He proposed that human agents

are mere enactors of the constructed power systems and structures to which they belong (Foucault, Faubion et al. 2000). Structuration theory as put forward by Giddens redresses this powerlessness to a degree by suggesting that the individual and society are mutually co-constructing and this allows some room for individual agency (Giddens 1984). The ideas around human action within this research are not built on such a limited view. Questions about what it is to 'make a difference' are centred more around engaging in an evolutionary process. Though it does not play directly into this discussion about modernity, structuration is introduced here to support the related discussions on human agency that are taken up particularly in part III of this thesis.

Taking a socially constructed view of the low carbon technologies helps to bring technology into a social context and it brings technology onto an epistemological turf that is compatible with action research. In order to do this, some aspects of modernity might be lost. By casting away definiteness, materialism and any hard facts that might be associated with is not something being lost? Overall the strong, and probably necessary, reaction to positivism had resulted in material things, scientific facts and, I hesitate even to say it, *functionality* having no real place in the postpositivist world. I had spent much of my life experimenting and trying to get things to work and I valued this aspiration whilst noting it was a distinctly modernist one. And to summarise: though I found the epistemological underpinnings of action research expansive and exciting, I struggled at times to place my logical, engineering tendencies within them.

My more personal concerns to reconcile different worldviews have been echoed more broadly in the field of action research. In the final chapter of the recent Handbook on Action Research, contributors consider the direction of future action research. From this chapter comes a strong sense that action research must start to contribute to the 'big issues' of our time and that in order to do so it must be more inclusive. The tone is conciliatory. Action research has now ploughed its epistemological furrow and can, indeed must, come out of its trench (Reason and Bradbury 2008a). It must build bridges and '*platforms of co-operation*' (Gustavsen in *ibid.* p697) with other researchers and practitioners who do similar things under different names. And these bridges, Victor Friedman suggests, might need to find ways of including elements from a view of the world that has been so at odds with much of what action research stands for:

The implication of this is that positivism is no longer the ‘enemy’ – To the contrary the time may have come to look for new allies among our old enemies and to create new coalitions in order to face the big challenges”

– Friedman in (Reason and Bradbury 2008a p.698)

So there is a general and a personal mandate to look at what remnants of modernity might be helpful in this research. The inclusion of modernity will be taken up in later discussions about quality and the practice of this sociologically-oriented action research that has, at its heart technologies that are so representative of modernist progress. The principle of inclusivity has more generally informed my research. The approach of learning history relates to this principle too, as the next section will explain.

Coming to Learning History

In Chapter 3 on Theory and Purpose, I set out a central inquiry question of the research as asking how sparse sites of innovation and breakthrough in addressing climate change might in some way be joined up so as to accelerate a more appropriate response across the institutional field in which they occurred. From the discussion in this chapter I have shown that this question might be reframed in action research terms as trying to understand how second- and third-person processes might be successfully linked to bring about systemic change. Several existing action research methods do seem appropriate. Second person processes might help inquire into how breakthrough projects have occurred. Appreciative inquiry, where the processes that have worked well are drawn out, appreciated and fed forward into new plans might build a wider learning from such projects (Ludema, Cooperrider et al. 2001). And third-person processes – for example dialogue conferences as suggested by Gustavsen (Gustavsen 1992) – might then support the propagation of that learning in the system. However in the last section I have described areas of action research itself where I have been inquiring and challenging. These together with my overall research purpose and my practical engineering propensity to ‘get things to work’ led me to look very critically at any method I might adopt in my research. Learning history, as the next section will outline, was a method that blended well with general action research approaches whilst also affording

the possibility to inquire further into the areas I have outlined above.

Following this logical argument, the next section will describe the learning history method I 'got to work' for the purpose of this inquiry. But first, a short digression, into a story that portrays a more weaving and winding path to method. On the surface of it, it might seem to contradict my logical flow. Though, in my view, it is no more or less true.



Coming to method

I was sitting in a Lowcarbonworks meeting in March 2006. I had just started my doctorate. I had a printout of the draft Bradbury/Roth chapter for the second edition Handbook on Action Research on my desk and mentioned it in passing during the meeting. Peter mailed me later and asked me to comment on it if I was reading it. I replied that I had no comment: I'd just been looking to see if it was applicable. But I had concluded it was not. I had read the descriptions and had been put off by the amount of effort involved. Teams of researchers at MIT had worked on just one project team's learning history. I wouldn't be able to do that. Later on, in October 2008, after I had my Merton interview data, I didn't even look back on learning history. Instead I spent days looking through the standard qualitative literature on doing case analysis. Yin wrote portentously:

too many times, investigators start case studies without having the foggiest notion about how the evidence is to be analysed..the author has known colleagues who have simply ignored their case study data for month after month not knowing what to do with the evidence

(Yin 2003 p.109)

On I went but found that I couldn't pick an approach off the shelf. Most of the approaches from outside of action research brought with them a whole set of interpretive frames I'd have to handle, justify or integrate. Being practical then I pushed the mounting literature to the side. Telling myself it was just a draft, I flexed my fingers and wrote up Merton. I drew in ideas I remembered from learning history but I didn't re-read the paper at that time. I called it a case and Peter said: "that's not a case, it's just someone's story". So I called it a learning history but I knew that it wasn't really that either. It was weeks before I dared go back to the literature and try to understand what I'd done in relation to it. Later when we were presenting our work at a conference, a colleague from the centre wondered if doing learning history had really been my own idea. "We'd been meaning to work on bringing learning history into our action research here for years", she said. I wracked my brains but couldn't remember Peter planting the idea in my head, but perhaps he had subconsciously done so. After all I'm good at picking up what needs to be done. Maybe I picked it up from the ether - the field which was lining itself up to go there. Learning history occupies this great big empty space betwixt action research and standard case-based research. With narrative inquiry on the horizon it is a fascinating territory and one that is crying out to be explored. It's attractive name represents that space and conveys an inherently appealing idea. I think that's what motivated this researcher to get it to work.

Learning History

Learning history is a relatively new action research method that was developed to deepen the learning from innovative groups and to support the diffusion of learning to other groups and organisations (Roth and Bradbury 2008). The approach was first pioneered through '*informed trial and error*' at MIT by Roth and Kleiner who conducted an extensive process of learning history with a large car manufacturer. Their aim was to explore how the learning from a highly performing team within that organisation might be assessed and used in the training of other teams (Roth and Kleiner 1998). They sought to somehow embed in the organisation's memory an experience of the transformational learning that had taken place within this team, '*without destroying the learning value of those efforts*' (ibid p.45). A learning history preserves that environment by taking a storied approach that retains the often more haphazard, context-sensitive, *human* aspects of a tangible event, happening or project. It is a form of insider/outsider research (Van Maanen 1998): the insiders tell their stories. The outsiders listen, write and analyse. Together the insiders and outsiders reflect and learn together. The approach was further explored by Hilary Bradbury's in her doctoral work at the Swedish environmental NGO, The Natural Step (Bradbury 2001). There she wondered how she might best introduce the space for reflection into the values and assumptions that were guiding participants' actions – in other words how might opportunities for double-loop learning be promoted (Torbert 1991). Other researchers have since worked on learning histories in a number of different educational, non-profit and organisational settings. A recent survey of the different learning histories that have been conducted suggests it as an emerging genre that merits '*serious consideration in the field*' of organisational writing and research (Amidon 2007 p.31).

Points of departure

The description of learning history as a genre rather than as a fixed method is helpful in situating my approach to it. The MIT description of the six stages of the learning history process¹³ implies a team of researchers, a single project focus and an emphasis on the

¹³ In their recent 2008 paper Roth and Bradbury compressed these six stages into four

core team of insiders together with those organisationally close by them (Roth and Kleiner 1998).

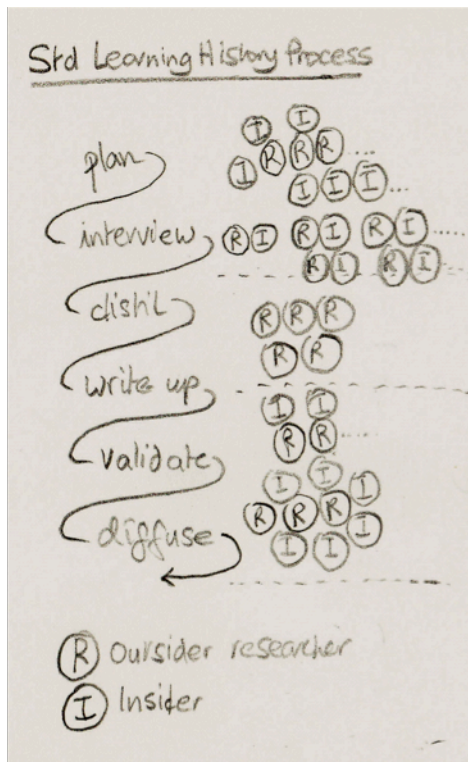


Figure 19: An organisationally focussed Learning History
The original 6-stage MIT Learning History process

Initial Planning: Convening a multi-stakeholder team and negotiation of outcomes. Co-design of the process.

Reflective Interviews: Insider/Outsider team meet in an interview setting in an inquiry process that aims to capture the organisation's learning through the lens of some of the key provocateurs

Distillation: Thematic analysis of the interview material using standard qualitative methods.

Writing Up: Alongside the analysis, a narrative is developed drawing on key sections of the interview to articulate the themes "in a compelling way".

Validation: Checking transcripts with original participants.

Diffusion: Sharing the learning history with original participants and others, clarifying what is valuable and seeking to make the learning history 'actionable'.

Adapted from: (Roth and Kleiner 1998) and (Roth and Bradbury 2008)

Figure 20: The original MIT learning history process

The diagram shows a multitude of researchers involved in a learning history of this kind. In my work I was a lone researcher. I planned to work with a set of different projects from different organisations and then with various actors from across the institutional field. But as I said earlier I became committed to getting a form of learning history to work. So I viewed the differences in my situation as quite simply necessitating some points of departure from the standard approach as I will now describe.

Inter-organisationally situated

A key point of departure was the context of my research. Learning history had, to my knowledge, not been used in the public sector in the UK and never directly on issues of carbon reduction. This offered an exciting opportunity to develop the genre and it gave me some important leverage too. Participants were pleased and supportive to be part of

something new. Not only was the institutional setting of the research new, so too was the way I proposed to work with multiple organisations.

Other learning history researchers have worked across multiple organisations before. Rupesh Shah used learning history to explore collaborative relationship between the corporate giant Shell Oil and the environmental NGO Living Earth (Shah 2001). And Kruschwitz and Roth conducted a learning history across three organisations looking at the collaborative relationships involved in the production of knowledge (Kruschwitz, Roth et al. 1999). However the focus of study was, in these cases, the inter-organisational relationship itself. Such examples I term 'organisationally situated' even though they involved more than one organisation. With that term I mean that the research was primarily interested in and of interest to the organisations involved. By contrast I termed my research 'inter-organisationally situated'. It started with single learning histories of five organisations and then looked at these not purely in relation to each other but in relation to the wider field of organisations – the institutional field - of which they were a part. I depict the difference in a sketch shown in the figure below:

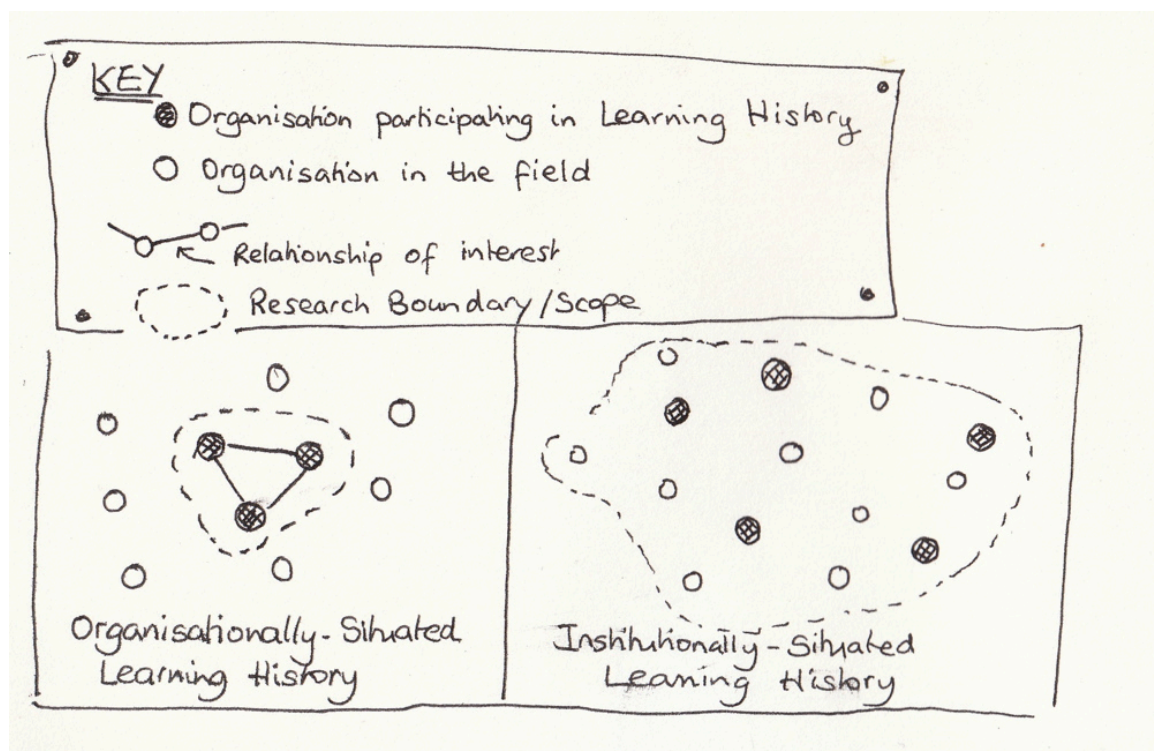


Figure 21: Distinguishing 'organisationally' and 'inter-organisationally' situated learning histories

With the inter-organisationally (or institutionally) situated learning history the boundary of

the research is mobile and it includes other organisations as well as those participating in the creation of a learning history.

Outward-facing, participatively oriented

This inter-organisational emphasis had other implications for the approach I took. The single learning histories I wrote were less comprehensive than a typical organisational learning history. This was a practical necessity – I was only one researcher – but it also made sense strategically. Working at the level of the institutional field, my approach needed to be more outward facing from the start. Diffusion and validation in the system and with third parties started as early as it could in the process. Descriptions of learning history to date typically tend to focus on the earlier stages of the process where insiders and outsiders collaborate. Engagement with the wider organisational context is the last stage of the process and is termed quite passively as “diffusion”. Though the importance of diffusion is acknowledged, the description of it can be sketchy and can revert to being prescriptive or even aspirational:

The document is not to be read by a few key senior managers and then stored in a desk drawer, like a report from a consulting group.... It is chewed over in discussions and workshops, and used as an “actionable check” – a way to spark new experiments and innovations – that may, in turn, lead to new learning histories

(Roth and Kleiner 1998 p.58)

I did not find much in the literature on the actual experience of this final step. There were descriptions of validation and feedback workshops but not much beyond. My wry commentary might be that everyone is too exhausted (financially or emotionally) by that stage to invest sufficient effort in it. Learning history is a time-consuming process and time, inevitably, runs out. Anecdotally I had heard it was hard to sustain energy after the writing of the history for the researcher and the participants. This was borne out by a colleague’s description of a learning history he had conducted as part of his MSc. He referred to his sense that the process ended prematurely at the feedback workshop, that it could have gone for another cycle but he had run out of time. And in some cases getting people ‘back in the room’ at all was a challenge. This was illustrated by Rupesh Shah’s account where convening the diffusion workshop proved very difficult indeed

(Shah 2001).

I detected then a challenge in the approach around maintaining the energy to diffuse and sustain the learning history process after the initial writing. At the least it was under-described. With a primary aim of impacting at the institutional level, my approach had to address that by drawing on second- and third- person action research processes to engage more broadly with the field.

Keeping the narrative spirit alive

The spirit of learning history is a narrative one. It draws on the age-old tradition of Oral History (Roth and Senge 1996) where the wisdom and history of a community is passed through the generations via stories that are told, retold and reconstituted afresh with each telling. My Irish roots meant oral history was a loved and familiar tradition to me. Following in this tradition, Roth and Kleiner advise the learning historian to follow the three imperatives of 'staying true to the data', 'true to the story' and 'true to the audience'. Of the story they advise that the histories themselves should have a "*compelling, mythic quality that capture's people's attention*" (Roth and Kleiner 1998 p.44). A popular description of learning history is that it is a '*contextualized jointly told tale*' (Van Maanen 1998; Bradbury 2001). There are clear links here to that aspect of narrative inquiry that sees narrative as a '*way of knowing*' the goal of which is to:

Illuminate tacit knowledge or to share theories in use that are implied in the stories and embedded in the accounts of practice. The ultimate goal is to draw lessons that enhance practice.

(Dodge, Ospina et al. 2005 p.292)

However there are challenges for learning history to realise this narrative spirit. It is necessarily a boundary spanning approach that includes, alongside story, analytical themes distilled from the data that can be built into theoretical insights. It draws in more formal methods of qualitative research. Whereas narrative inquirers experience tensions at the boundary where their stories meet the more formalistic/reductionist world that might undervalue or over-interpret them (Clandinin and Connelly 2000) such tensions exist right within the learning history process itself. In its combining of the narrative and the analytical it recalls the psychologist's Bruner's description of there being two distinct

modes of thinking. He called these the narrative mode and the paradigmatic mode that, “(though complementary) are irreducible to one another” (Bruner 1986 p.11). He went on to propose that the narrative mode comes naturally to children as young as five who can already recognise a storied structure. Narrative is detailed driven, with a tendency toward ‘gripping drama’ that leads to “believable (though not necessarily “true”) historical accounts” (Bruner 1986 p.13). And significantly it pays attention to wavering human desires what Bruner calls ‘the vicissitudes of intention’ (Bruner 1986 p.16). By including the messiness of human endeavour, the potential for learning from others’ experiences and contexts is retained. In the theory chapter I described how ‘change’ in this work is conceptualised as being engaged in and part of an evolutionary process rather than distant from it. The logic of ‘visionary’ change with all the complexity of chance, swerving intentions and particularity is ideally suited to an exploration through narrative. However the narrative mode is all but absent from most formal organisational settings. Roth and Kleiner call this phenomenon “mythic deprivation”.

Most organisations are mythically deprived. Official documents and presentations are bereft of stories; managers talk in terms of highly rationalized, abstract explanations that do not typically tell how their numbers of policies really got evolved.....

People in organisations get their myths the old-fashioned way - at the water cooler, in the rest room, over early morning coffee before everyone get’s in, in late nights “watering holes”.....

(Roth and Kleiner 1998 p.55)

Simplistically then one might say that learning history manages to integrate both modes of thought. But does it? In reality I think there are tensions and challenges in doing this that still need to be addressed. By placing narrative and analysis side by side and presenting them back to an organisation as a formal document the researcher is likely to stumble over some difficult choices and confusing moments. Some of this erodes the narrative spirit of the learning history. Learning history documents, in their form, are sometimes less than compelling with little narrative structure. Interviews, and this was

my own experience of being on both sides of a learning history¹⁴, had a tendency to move from point to point rather than along any storied line. I will explore questions of form and myth in later chapters. For now I want to summarise that the final point of departure in my method arose from a personal commitment to narrative and was about exploring how to keep that spirit alive in the learning history. But this personal impetus was very consistent with where my theoretical explorations of change had led me.



Finding the storyline for the research....(Logged as a story to the BLOG¹⁵ in April 2008)

I read some of Rupesh's PhD quite early on. The librarian had grinned at me, I thought a tad malevolently, as she handed me the gigantic tome from behind the desk. But as I sat down and started to read, I became enthralled. I must have made for a strange sight in the library that day - grinning, clucking and shaking my head as I read a very dry looking hardbacked PhD. Rupesh's account of his trip to Nigeria conveyed what it was really like to try to conduct a learning history between two closely related organisations (in his case Shell and the NGO Living Earth). It was fascinating and showed up really interesting issues around power that required attention. I mailed Rupesh to thank him and not long after that we arranged to meet and we went for a long walk along the canal near Bath. I told him I hoped to do a learning history, not of one organisation but of a handful of organisations across local authorities. "What's your common storyline?", he asked, "you need something that binds them together in some way". Together we talked about how it could be "The story of how local authorities innovate for low carbon".

¹⁴ I was interviewed for a learning history of the CARPP conducted by Liz Schell from Monash University as part of her doctoral work (in preparation).

¹⁵ Full story logged under "How I got started with the research" on the learning history website http://academicmum.typepad.com/lcw_learning_history_inno/2008/03/a-story-about-t.html

Learning history in an open system

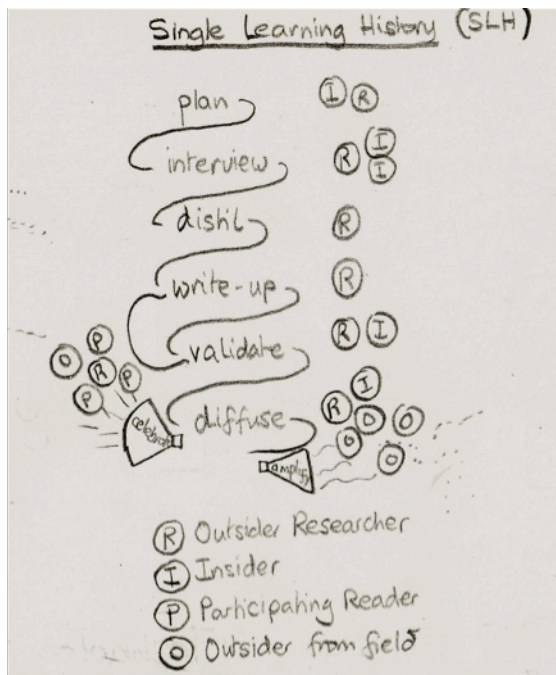
Responding to challenges.

I have reviewed above some of the areas of learning history that I felt merited attention. These points were surfaced by my trying to fit the approach to my research purposes and context but they relate to challenges that apply more generally to learning history. To summarise these points of challenge include: the high investment of time and effort it requires; the difficulties in sustaining engaged participation; the potential for a greater amplification of the learning into the wider system and to other stakeholders and finally, the challenges of restoring a sense of myth using a vehicle normally devoid of any colour or excitement: the organisational document.

I will describe now in more detail the approach of 'learning history in an open system' that resulted from my practical attempt to 'get this genre to work' for my research. In so doing I am suggesting it as an approach for inter-organisational learning and as a response to some of the more general challenges with learning history. I will set the approach out as a proposal with quite a confident and definitional tone. This tone belies the struggles and challenges there are with the proposition. These will unfold as I reflect on my experiences in the field in this and later chapters.

Unlike an organisationally situated learning history, an inter-organisationally situated learning history involves at least two nested levels of engagement, as I will now describe. Firstly single, lighter learning histories are conducted at the organisational level. These are then stitched together to become part of a wider engagement in the institutional field.

Level 1: The single learning history



The single learning history process

Features

Plan: Planning is light involving initial engagement and explaining the process.

Interview: Interviewing is conducted with a view to getting a few perspectives rather than an exhaustive rounded story.

Distil: As with the MIT approach data is processed systematically, themes are distilled.

Write-up: The history is written up in a more mixed and engaging form with a view to narrative unity.

Validate: The written history is checked back

Diffuse: Several levels of diffusion take place – back into the organisation, to others mentioned in the history and out to the wider system.

Figure 22: My suggested single learning history process

The single learning history flow is shown above. It is like the MIT six -stage process but it is lighter and less exhaustive. The process starts with the initial contracting which is done with an individual rather than an organisation. This initial engagement is transactional. The research process is explained in a digestible form; the storyline is discussed and dates and times for interview are set. Just a few interviews are conducted. There can be no pretence that the full story is represented: the aim instead is to *really listen to* and value the stories that are told and, to be *as open and inclusive as possible* in the onward telling of them. During distillation a timeline is created, key events and phases are identified and the transcripts are annotated with reflections and themes that arise from the data. At this stage, sometimes a further interview might be negotiated if an important part of the history is missing. The writing step – and more will be said of the actual form of the history in a later chapter - then pays particular attention to the crafting of an engaging narrative that honours the story(ies) that has been told, whilst simultaneously pointing to the possibility for it to be enriched. The diffusion step builds on this by being proactively participative. Those impacted by the story – I term them ‘participating readers’ – are not sealed out from the history but welcomed into it. They

are actively invited to engage with the history, to comment and to add their perspectives. This first definition of the single learning history was motivated initially by the necessity to economise effort. Later I came to value the way it supported and celebrated a single narrative. The invitation to participating readers had not been part of my original plan, but it became clear as the research started I needed to explore how others who had been involved might be brought into and included in the process. In this way the boundary of the single learning history is not as fixed as that of other versions of learning history where participants are either involved in the process or they are not. Here the single learning history represents a narrative of a few that, for a time at least, is open and alive to whomever might wish to join in with it. Though the purposes underlying the method described here are *celebration* and *inclusion* this approach is in fact replete with issues of power that will be discussed in more detail in Chapter 7.

The diffusion step is already departing from the standard MIT approach by focusing as much on the wider field as it is on the single organisation or champion of origin. For those directly or closely involved, there is the explicit learning agenda as set out in previous writing on learning history. To this agenda, I have added, at the point of diffusion, an explicit agenda of celebration and recognition for what has been achieved. This is with a deliberate view to *inspire* and *amplify* this kind of practice into the wider field. This is a more hot-blooded interpretation of the term diffusion that implies seamless, uncontentious transfer of ideas and practices. And as the later description of the learning history workshop will show, particular care needs to be taken that the celebration is not of the superhuman powers of the protagonists but rather of their glorious but maybe flawed human qualities. Tenacity, self-doubt, ego, pride are all qualities that help to make the celebration real. Similarly inspiration cannot be foisted on the wider field but offered to it in the form of a story that individuals can recognise. Inspiration comes from a connection of one's own experience into the story rather than from the distant admiration of it. The diffusion step then is vital in this interpretation of learning history and is carried out with clear purposes of celebration, participation, inspiration and amplification.



Celebration, Participation, Inspiration and Amplification

Aspirations of this kind of open system learning history approach

The original reasons for having less exhaustive single learning histories at the organisational level were purely practical. If I was to have time to link the histories at the institutional level then I could not dwell too much on each one. However this practical impetus pushed the methodological direction in an interesting way. I had to find ways to develop and justify being less comprehensive. With that came an interesting tension between being inclusive of everyone and at the same time valuing individual narratives. It also pushed me quite naturally toward the more distributed working at the institutional level as advised by Gustavsen:

Instead of using much resources in a single spot, resources are spread over a much larger terrain to intervene in as many places in the overall movement as possible.

(Gustavsen 2003 p.96-97).

Level 2: learning history at the institutional level

Single learning histories are then stitched together and intertwined with second- and third- person processes of inquiry to form the institutional learning history. The figure below depicts the sequential process of gathering the five single learning histories and highlights how processes of amplification into the field are to the fore throughout this process.

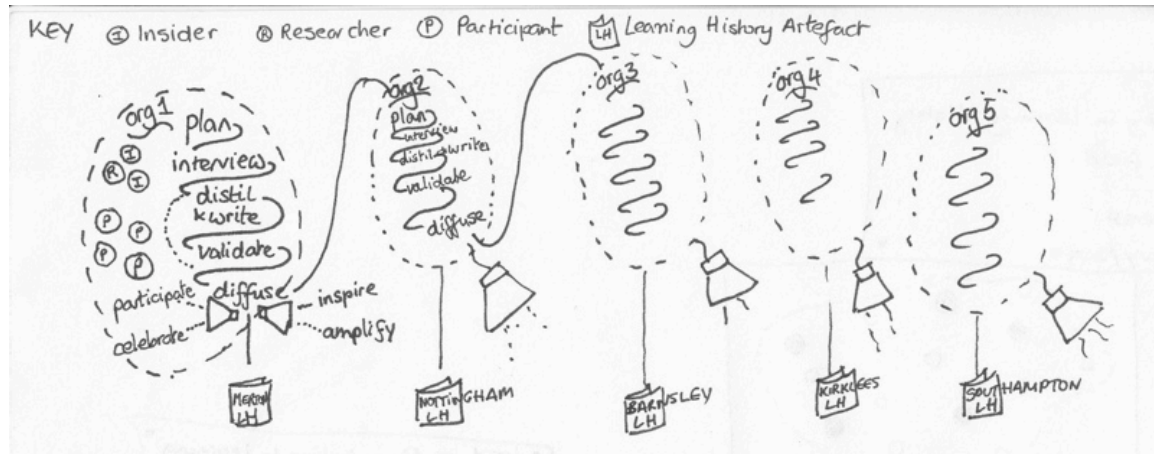


Figure 23: Stitching single learning histories together.

The figure shows the five single learning histories being conducted sequentially though in reality the stages do overlap. At the end of each individual history, the learning is reflected back into the organisation from which it came with the purposes of inviting further participation and celebration around that history. At the same time the history is taken out to the institutional level and beyond with the purposes of inspiring others and amplifying and broadcasting what has happened. Feedback returns from both the inward and outward reflection of the history and this can be folded into the next engagement. The process is open and messy with the outcomes of one engagement informing and shaping the next. Though the individual learning histories describe very different initiatives they share a common thread of process and offer varying perspectives on the common institutional storyline which is: 'how technology-related innovation for carbon reduction comes about in local authorities'. Mirroring the principles outlined at organisational level, this institutional level learning history is not presented as a fait accompli but is offered as something that is *open* and *inclusive*. It is a live process organised around a set of artefacts (histories, stories, pictures) and so on. As it is offered, participation and engagement with the institutional learning history is sought with a view to expanding and enriching it rather than merely disseminating or critiquing it.

This will be evidenced in Chapter 5 when I will describe how I experimented with interactive blogging as a way to open up the institutional learning history and make it inviting. In this way particular attention is paid to keeping the learning history alive through participation and there is a strong suggestion that this needs to be done quite deliberately through a form of mediated action research.

Several experiments with mediating the institutional learning history are described in this thesis. One illustration, of which more shall be said later, is the learning history workshop which expresses several of the characteristics described above. Protagonists from the single learning histories are brought together with interested stakeholders from across the field. There is a sense of celebration and discussion around the single learning histories but these are situated only alongside the stories of the outsiders present which are valued equally. The stories of the moment are those belonging to the participants in the room. However the new insights emerge when participants discuss and create an interaction between the new stories and those of the crafted histories. In this way the storyline is *expanded* through the participative process.



Figure 24 The learning history workshop – expanding into the institutional space



Expanding and including, forever incomplete

There is a recurrent theme of expanding narrative in this method. The storyline flexes and changes rolling forward to include new storylines that are laid alongside the old. Both the written history and the process around it are open. They claim incompleteness and are always inviting of new perspectives and comment.

To summarise then a method for conducting a learning history in an open system is proposed as a way of working at different levels of organisation, with different degrees of participation but with some common principles.

From proposition to experience

The above section proposes a method and starts to draw out some of the distinguishing characteristics of this interpretation of learning history and resituates it in relation to the literature to move it toward. There will be a change of tone in the next section as I move into the experience of the field. The purpose of this is to give an insight into how some of the facets of the method – like those mentioned above - became apparent and deepened as the research proceeded. I have chosen two qualities of method on which to expand.

Tales from the field

Really listening



Theme of 'really listening'

A recurrent theme in the research is the importance of 'really listening' to the story of an individual or organisation.

My first learning history interview was in Merton though I didn't know it at the time. It was only when we were underway that I realised Adrian was telling me a self-contained story that would be fascinating for the research. I had approached our conversation thinking we might inquire together into low carbon innovation and specifically into the story behind Woking. So I did not see our meeting as an interview, but rather as a conversation I hoped would be mutually interesting. Later when I listened to the tape I noticed how hit-and-miss this was. We sometimes hit a conversational riff that was exciting and seemed genuinely inquiring. At other moments however it seemed that my interruptions only knocked Adrian off track from the story he had to tell. When I wrote the learning history – and this was the experience of all of them – the result was very close to the story he had told. So when the time came to sending this simple account back to him I balked.



November 27th, 2006

Sending the Merton learning history back for validation

The buoyancy I felt at the end of last week has been replaced now by a kind of distracted nervousness. On Friday Adrian asked me for what I had written, so I sent it through to him. And immediately started to worry. Would he be shocked by its simplistic tone? Would he feel I'd just regurgitated his story and added nothing of value? I opened the document again and again to convince myself it was ok. But then I'd close it quickly and be plagued with an image of Adrian shaking his head as he read it.

I need not have worried. In our debrief phonecall Adrian commented that he liked how the history reflected what he said. He went on to say that many researchers came to see

him but they often went off and wrote something different or often never returned. Perhaps then there was value in just listening properly and telling it back in a way that was new, but that was true to the original story. This pattern was to be repeated with all the learning histories. Histories, when returned to the original interviewee, were received with surprise, momentary excitement even.



July, 2007, Quotes from field notes on a debrief call with a learning history participant

I phoned X today to brief him on the learning history I've sent him for validation. When I call however he is already half way through reading....here's some of what he said:

X: Hello Margaret – I'm reading all this stuff you're writing about me! It's great – I'm really enjoying it.

My thoughts: (Blimey - he is already on page 24! And he hasn't read any of my briefing notes...he wanted to dive straight into the nitty gritty)

X: What's really struck me [reading it] is.. here is someone who's looking at how I think, who is commenting on my thought processes. That is something I don't often do ...you're helping me to see what I'm doingI'm too close to it you see.

As interviews proceeded I found myself intervening less and listening more. When I went back over the tapes and transcripts I marvelled at how much was in the data when I really engaged with it. The act of 'really listening' in the moment and after with the transcripts seemed a valuable, if unusual thing to do. Though creating the space for the interviews was often difficult, once they had been scheduled, participants seemed to relax into that space, escape into it even. There was never a rush to end the meeting; interviews often over-ran and some participants commented on how good it was to just take the time to sit back and think things over and talk about what had happened. One participant mumbled apologetically at the end of the interview: "Gosh that was like a therapy session". Another, when sent the transcript asked for reassurance: "I hope I didn't ramble on too much".

It is evident that managers struggle with the concept of reflection – both in supporting it for others and taking the time to do it themselves. Reflection is unnatural in a business culture that predominantly recognizes and rewards action.

(Roth and Kleiner 1998 p.58-59)

Participants were invited into a reflective space during interview. Learning history, like other forms of action research, validates that reflection by lending a listening ear to it. What is unusual about it is that the listening ear is unconditionally pressed to the words of the interviewee and kept there for a long time. The high investment stage of processing transcripts and writing weights those words far more than is usual. Little wonder then that being on the receiving end of this listening is surprising or even unsettling.

The theme would continue beyond the interview process. As I brought the histories to those who might learn from them, I introduced the idea of “active reading” as an exhortation to participants to slow down, notice and value any reactions they had, and to really engage with what was written. I wanted to connect participants into a reflective and different space. I see this now also as an attempt to reproduce the practice of ‘really listening’ through the research. It had varied success. The first active reader, Thurstan from Brighton & Hove, agreed to read and respond to the histories I was writing. In my 1:1 work with him, he found the ‘active reading guidelines’ very helpful. They



Figure 25: Active readers ‘really listening’ to a history?

encouraged him, he said, to get into a good state of mind and to let rip with his comments and feelings which he scribbled over the document. In the later work with B&NES and at the workshop active readers marked up worksheets that I then copied and analysed. Here the responses showed an engaged reading experience but there was an inevitable skimming over detail and nuance. Readers often read hastily and missed a lot of what was described. Over time I came to conclude that one read, however active it might be, was still not enough to get all there was to be had from a history. Here in lay a question then – a deep question on method. Would the culture of busy action that learning history is trying to slow down by creating reflective space ultimately find a way to undermine that space anyway? Learning history necessitates not only the telling of stories but also a capacity to really listen to them? Does learning history hold the attention of our skim-reading, non-listening culture open long enough for something meaningful to happen?

The theme of ‘really listening’ I first articulated in a co-supervision session in January 2008, when Geoff had been probing me as to what I hoped the research might achieve.



January 2008: Responding to Geoff, Nick and Dave in a supervision session

MG: Just listening to people. That’s a thread that has come out of my work that has surprised me...the value there is in really, really listening to one transcript and really valuing what that person who has done a lot of work has to say.



Really listening to my own tapes....

Whilst writing I hastily return to the audiofile of that supervision session. I want to grab a quote from that session to illustrate a point I am going to make about ‘gifting’. I open the file. It is an hour and a half long. Damn! I’ll never find the quote. I start listening and there is my voice articulating what the research is about, interjected with gleaming insights and probing questions from my co-supervisees. These past three years, I’ve told and re-told the story of my research, turning it over and again. And if I ‘really listen’ to just

this session I feel sure there is a richness here that will deepen each time I reflect on it. I start transcribing and resolve to draw some of these excerpts into later chapters¹⁶. It feels so alive.



Figure 26 ‘Really listening’ to stories at the learning history workshop – a gift?

The theme of ‘really listening’ is deepening as I write. In that same supervision session my colleagues picked up on the sacrificial nature of this act of listening. Together we discussed how the return of a history to the interviewee was like giving an unexpected gift. This analogy fitted well with the quizzical excitement I’d detected in participants and it fitted too with one of the purposes of the diffusion step, celebration.

So the space for ‘really listening’ that was opened in interview led to further acts of careful listening in the research that were inherently appreciative. The act of ‘really listening’ served my hopes for celebration and unexpectedly it also moved me in relation with the participants. What started out as a transactional engagement deepened through the process of appreciation that occurred through the simple act of listening.

From push to pull

Working with ‘push-pull’ energy was a second practice that emerged from my working in the field with open system learning history. With this research there was a constant

¹⁶ These will appear in chapter 14, “Questions about the Postheroine”

forward-going movement of participants being drawn into the research. And over time I noticed different, switching energies between these participants and found myself developing ways of working with it.

From the outset I wanted to inquire into the value there might be for different kinds of participants in the learning history research and to help me do that I developed a terminology to distinguish them. There were protagonists whose stories were featured in the histories; there were participating readers who were involved in those stories; finally there were 'learners' – I called them active readers - from organisations and sectors near and far, who had something to learn from engaging with the histories.

As I have already described in this chapter, my engagement with the literature on learning history meant that I was already anticipating a difficulty with sustaining protagonists' energy through the process and long enough for them to get value. I worked hard to address this. After writing a history there was a process of signing it off. As we went through this process I punctuated it with checks, both verbal and using feedback forms, as to how the protagonist was experiencing the process and where the value for him or her lay. These checks I called reflection points. Though the primary purpose of the reflection point was evaluative they also represented my more hot-blooded hope that they might continue to aid learning. By pausing and asking participants to reflect I hoped I might be able to keep them engaged for longer and help them to squeeze even more value and inquiry from the process. My starting question as to where there was 'value' became more strategic:

Might reflection points not only assess value but also add value to the process?



Hot-blooded Hope....

My hope that the feedback requests would create space for reflection and learning was logical too. The scientist in me knew this was an experiment that was interesting irrespective of the actual outcome in terms of learning and reflection. The action researcher in me knew that I might never really be able to judge that anyway on the basis of a form. And the human in me just hoped hot-bloodedly that there would be value in this and in a way I could see. Wouldn't it be great if a participant filled in the reflection point form at length showing deepening thoughts emerging from the process? In the course of my research I sometimes caught myself longing for 'good' results – some indication of 'success' in the good old-fashioned

terms of making a great, big, discernible difference. My shorthand for this was 'ego' – though I wonder if it wasn't something a little subtler. Holding a systemic view of change felt wearing at times. Especially for an achiever like me.

This hope proved somewhat idealistic. Sustaining quality engagement with participants beyond the interview and especially after the history had been sent back to them was difficult. Participants did fill out the forms and returned them to me with interesting insights but there was little time or will for follow-up discussion. And with the exception of Southampton it seemed to land more as a job I'd asked participants to do rather than as a potentially valuable aid to their reflection. So, probably like many a learning historian before me, I noticed an overall trend of disengagement from participants after the history had been finalised and discussed with them. Though I had expected this intellectually the felt experience of it was akin to a sense of impending failure. My shiny inquiry question about value was sometimes flipping into a panicky frustrated:

How the bloody hell can people be kept engaged when their day-to-day work is so demanding?

And when I mentally scrolled to the horizons of the research plan there loomed a multi-stakeholder workshop where the protagonists would gather and share learning. No matter how I tried I couldn't quite visualise a situation where these participants might, as Adrian put it, '*get out from their metaphorical desks*'¹⁷ and attend such a workshop. It felt exhausting to think of pushing to get them 'back in the room'. It was in the midst of this gloomy mindset that I had an experience of the liberating switch from 'push' to 'pull' energy.



Journal Entry, May 14th, 2007

Push and pull with participants – from protagonists to learners

It is such a slog getting the [current] history signed off. I'm getting no replies to my mails. Gosh I really noticed a difference in energy when I showed Thurstan the Merton learning history at our meeting in

¹⁷ I often found myself using quotes or phrases from the learning histories – particularly the Merton History but others as well. I wondered if in the end, it was not I who was deriving most value and learning from the whole process due to my immersion in the material.

Brighton last week. When I casually proffered the Merton history across the table by way of illustration, he grasped it and, became involved in it immediately, not letting me turn the page. I felt him being drawn 'pulled to' the research rather than me having 'pushing him along' into it. I think it'd do me, as a researcher, as well as the research, a world of good to be dealing in some 'pull' situations for a change.

The passage below describes a moment when my own energy that had been depleted by trying to keep the research going with some participants was considerably boosted by a newcomer's interest in it. This caused me to question afresh where the value in the process lay for participants and highlighted the 'pull' energy as a distinctive and important feature of open system learning history.

Noticing Thurstan's receptivity to the research and his genuine curiosity when I showed him the Merton learning history I remember thinking fast in the meeting. How best might he become involved? The Merton history felt like an offering, a discussion point that 'pulled' him into the research in a mutually useful way. He didn't have a readymade case to feature. He seemed to represent instead the next wave of innovators. By the end of the meeting we had agreed to work together. Thurstan would be the first 'active reader' of the learning histories as I developed them. Though there were still four more histories to be written there was a shift in the inquiry that night from protagonists to third party learners ('active readers') and the start of a real appreciation of the role learners and readers would play in bringing the histories to life. I realised that if I worked with the 'pull' energy of the research, then participants could self-select into and out of the process according to where the value for them lay. When I worked with 'push' energy I was determining where the value *should* be and trying to impose that. There would be a tension throughout the research between the two. Sometimes I needed to push with my procedures, follow-up calls and careful conversations to keep participants engaged in what was ultimately a rewarding experience. However balancing that with periods of letting go of 'push' and working with 'pull' sustained and nourished the research and kept it alive. It was this conscious switching from 'push' to 'pull' that energised the learning history workshop event that is the subject of the next chapter.



Learning point: work with 'push' and 'pull'

If I can create the opportunities those who have most value to get from the research may well be drawn to it at the appropriate time. Working with 'pull' feels different to working with

'push' practically and emotionally for the research. It creates a different set of questions and challenges that have to do with creating opportunities and thinking fast when they do come along. Working with 'push' has to do with tenacity, robustness and clear-sighted purpose.

Closing this Chapter

The arrival at a method I have called "learning history in an open system" has been explained in the context of personal life experience, project aspirations and the existing literature on action research and learning history. The method has been placed as an interpretation of the learning history genre and some of its qualities as distinct from other interpretations have been discussed. By drawing on my experiences in the field, I have expanded upon two practices associated with the method. Further detailed micro-practices of method will be similarly introduced in later chapters. The next chapter brings some of the key elements of method to life with a discussion of the learning history workshop and its relationship to questions of scope.

5. Questions of Scope and Form

The Learning History Workshop

In this chapter two different inquiries are interwoven into a discussion of a key event of the research: the learning history workshop in February 2008.

The first inquiry relates to how this piece of action research might achieve a wider scope and so get past the problem of the single-case. This question was introduced in the last chapter, and the learning history workshop was part of my response to it. The second inquiry was into the form of learning history. It crystallised as a result of what I had learnt from the design of the workshop and from the event itself. This inquiry was an exploration of the different forms that might carry the essence of a learning history. On the face of it the two inquiries might seem to be quite disconnected.

In this chapter I will start with that first inquiry about scope which will lead to an introduction and discussion of the learning history workshop event. It is in reflecting on that event in its own right that the second inquiry on form starts to come to the fore. Finally in my conclusion I will reflect on how the two inquiries became linked for me.

Inquiring into Scope

In Chapter 4 I proposed that the institutionally-situated learning history I was developing had the potential to achieve a scope that went beyond the limits of the single case. However I noted too that with learning history, whether it was situated in a single organisation or otherwise, there seemed to be a real and practical challenge of sustaining energy in the process all the way through to the diffusion step. These challenges were not always brought to the fore in the literature and were in danger it seemed to me, of becoming normalised as just part and parcel of a learning historian's troubled life. I felt I needed to confront this question of sustaining energy head on because it directly impacted on the scope of my research and therefore its purpose. If I were to make a difference at the institutional level then the process would need to create

interest and engagement there.

Part of my approach to sustaining energy was to be light on my feet across the institutional field. Instead of drilling down into one organisation, I spread my research energy more thinly across more organisations and put some energy into creating connections between them. I was guided by Gustavsen and his advice to 'create many events of low intensity' (Gustavsen 2003 p.97). In the sketch below I show some of these events. Many are detailed or referred to in passing in different parts of this thesis.

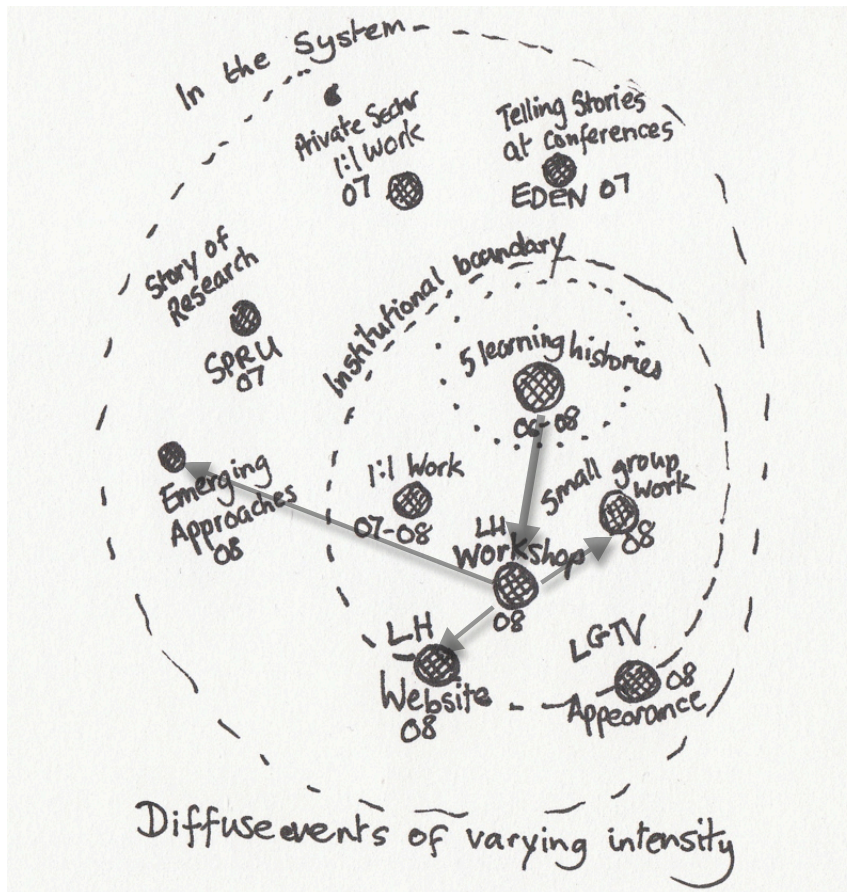


Figure 27 Different events that occurred in the duration of the research

The diagram depicts events spreading out from that first central event of the research: the creation of the five individual learning histories. Then within the institutional field (note the boundary) and outside of it various things occurred that included conferences, seminars, a website, even an appearance on the local government TV channel. The diagram to a degree represents successive inquiry cycles. For example the arrows show how the first cycle of creating the learning histories gave way to a second cycle of inquiry at the learning history workshop which in turn led to further cycles of inquiry further out in

the system.

The diagram illustrates my attempts at increasing the scope of the research. Note that for now I exclusively refer to 'scope' and not 'scale'; I will distinguish the two terms later in this chapter. It shows that the events I orchestrated were similar in nature to what my reading of Gustavsen suggested. They were distributed events; they varied considerably in their intensity and they varied too in the degree to which I might know if they had some consequence. So the small group work 'event' occurred over six months, it involved a set of ten participants from my local council B&NES and from these participants I could request feedback. In contrast to that, my appearance on local government TV took a few days of preparation, a few hours to tape and was then subsequently broadcast to all local authorities soon after. Apart from witnessing a peak in my website hits there was no real way of knowing the effect it had. As I explained in the last chapter I knew I could not hope to build a social movement from scratch but I was interested instead in connecting to ongoing processes of change in a meaningful way. So the different experiments and events I orchestrated had this idea in mind.

Here I will hone in on a central event on the landscape shown above – the learning history workshop in February 2008. This was the experiment where I could try to push out the bounds of learning history scope. It also helped me to articulate some of the ideas behind 'learning history in an open system' that I presented in the last chapter. At the workshop by inviting others to participate in the research alongside those who had been featured in the learning history the aspirations of joint celebration and inspiration would be served. Protagonists would feel valued and rightly celebrated for what they had done. On the other hand the new participants would be able to participate in that celebration by sharing their own stories, thoughts and ideas. In this way a whole new and possibly louder buzz in the system might be created and so the scope would be widened. In the next section I discuss this workshop as an event in its own right but also in terms of its possibilities for increasing the scope and consequence of the research.

The Learning History Workshop

I want to pause here and dive into a bit more detail on the felt experience of creating resolve around this event. This is a retelling of how this workshop came to be but from a less rationalised perspective. I do this to surface how the shifting plates of my inner experiences (conscious and sub-conscious) and outer conversations moved together to lead somehow to decisions or, as in this case, moments of resolve. This then is a short back-story – a zooming into some of the subtle detail of human experience that airs some of the doubts and fears and hopefully rescues this account from becoming too sanitised.



A back story – July 2007

So right from the start I was keen to confront this issue of ‘getting the system in the room’. As I engaged with participants I could see that it would be difficult to get them to take time out to come to Bath for a workshop. I tried to warm them up in interview to the idea of a workshop and I got a reasonable response but not one I felt would translate into them physically boarding a train. ‘How am I going to get past this?’ I worried. As time proceeded, the key to confronting it seemed to lie with the open-system approach – this ‘push’-‘pull’ idea. I decided that the only way to get anyone to engage with the histories was, counter-intuitively, to get loads of people to engage with them. So to create a bit of a buzz about them just like Adrian had created a buzz around the Merton rule. In supervision in July 2007 I remember gloomily sharing this insight with my supervisor Peter. I looked down at my shoes and admitted that I still didn’t know *how* I might attract loads of people in, but it was the thing to do and the fact that it was just weighed like a burden on me. And in the week following that meeting it continued to play on my mind. But a few things happened that led to a shift in my resolve.

First, I was very encouraged by a positive meeting I had with insider Steve Waller from the I&DEA in early July¹⁸. In our meeting he really engaged with the idea of the

¹⁸ Described in Chapter 2. Steve also was a protagonist in the Nottingham Declaration learning history

workshop and gave me his full support. As my mind whirled I could start to see, how, with Steve's support this workshop could happen. Second, and I only see this now when I return to the journals of the time, I had a dream which I had written into a poem.

Dreams of Flying – written July 2007

An opera Diva sings
Poised at a window above
I dive out into the blue night
as Piano cadences
my arms flap
hopeful and wild
the thin air
cannot catch the feathers
that sprout sparsely
multicoloured plume
vertically I fall
once more
a graceful corkscrew
heaps onto a moss bank

I had forgotten about this dream until I started to write this chapter. Yet when I find it now I remember it seeming significant to me. I remember wondering if this said something about the beauty and inconsequential nature of trying something even if it does not quite work. Dreams of flying recur for me at times and it seems when they do they represent aspects of inward growth. Though I am only just beginning to see this emerging as a pattern.

The culmination of all this dreaming and whirring was a realisation that I had to approach this whole event in a much more bold and presumptuous way. I had to face right into it. In a sudden moment of clarity I wrote to Peter asking him for full project support:



Extract from letter to Peter, July 2007

Very much reflecting on the supervision with you earlier this week I have decided to really make the workshop fly and to stop being so terrified by it. In this case I need to go for it and stop messing around being tentative and casting myself as a kind of Tiny Tim character in relation to it. So if I manage to achieve some energy around it then I would really like a good strong project backing and support if that was possible. This isn't too different from what we discussed - but I'd like to be able to be a little more presumptuous about the event being important to the project. In practical terms this simply means assuming the action research team attend so they can guide conversations at café tables but it also means I'm asking you to financially support the event. Of course it'll emerge as I go along and if it compresses back into something small then fine but I wanted to talk about this workshop in a positive way and include it as a project event.

Peter replied in full support. Geoff Mead, a colleague at the centre, and my second supervisor was engaged to work with me on the design and facilitation and so it started.

Choices in the telling

In this chapter I have been particularly concerned with how to achieve congruence when telling about the learning history workshop. There are multiple layers to it: there is the back-story of getting it to happen: the nitty gritty of drawing on networks, picking up the phone, e-mailing strangers, working contacts, making choices. Then there is the back-back story of my own emotions and life in relation to all this: the hopes, the worries and the way all this soaked into my family life. And there is the event itself: the design of it, the form it took, the subsequent ramifications from it and so on. During the event a colleague Chris and I stood at the back wall while the groups worked on the learning histories. "You know what this is", she said, "It's a collective appearing act – we are making visible here what is normally not spoken about". Chris was making a reference to Joyce Fletcher's writing on relational practice with which we are both familiar.

Postfeminist Fletcher's influential research with female engineers led her to argue that a whole gamut of skills that are often termed 'soft' or 'feminine' and have to do with team-play and building and maintaining relationship in the workplace tend to be systematically ignored or 'disappeared' due to the gendered nature of that workplace. She called this

phenomenon a 'disappearing act' (Fletcher 1999). Here at the workshop – by enlivening the human stories of the learning histories we were involved in a 're-appearing act' of the complexity, the mess and indeed the relational human aspect of these kinds of projects. I have often thought of the workshop since in those terms. As an event overall it was 're-appearing' what often gets taken for granted and by doing that it was implicitly saying 'this is important', 'this is important'. So when it comes to writing about it, I am naturally quite mindful as to what it is, from this complex story I choose to 'appear'.

Choice of form – a digital story

To help 'appear' some of these different levels, I have chosen to offer my description of the workshop in the form of an eleven-minute digital story. A digital story is a powerful new form of storytelling that has emerged in the mid-90s as digital media opens up new avenues and possibilities. Inspired by ideals of cultural democracy and community participation, a group of media artists, designers, and practitioners came together in San Francisco and created this new form whereby people could tell a personal story by combining music, voiceover, digital photos and text. Inspired by the San Francisco work, Dr. Daniel Meadows of Cardiff University and Karen Lewis of the BBC created "Capture Wales"¹⁹ – an award winning 8-year project where people from communities across the country were guided in a process that helped them to create a digital story about any subject personally important to them. It was in December 2008 that I heard Karen Lewis speak about this project. As she shared the resultant stories I became very excited. It was feeding the inquiry on learning history form that had been developing over the course of the research but that crystallised out of the workshop process.

So at the time of writing this thesis I have just embarked on a new inquiry, which is on the crossover between digital story and learning history. And my first attempt at a digital story is shown here to try to convey some of the complexity of the workshop as well as to represent a point of an ongoing inquiry into form and method. This inquiry will be described in more detail later in this chapter.

This choice of form does not evade the choices mentioned earlier regarding what to

¹⁹ <http://www.bbc.co.uk/wales/audiovideo/sites/galleries/pages/capturewales.shtml>

appear or not. In making those choices I have held in mind two kinds of audiences. The first are my examiners. I would like to show that the workshop was a piece of quality participative action research that makes a contribution on method. The second kind of reader is any peer researcher or consultant who might find something of value in this short history of mine. Symbolising this constituency is my co-supervisee Nick. Nick is an experienced facilitator who currently works to host networks of rural activists in virtual networks and face-to-face encounters. Nick is a real person who, in supervision, directly asked me to bear someone like him in mind when describing this workshop. The digital story then is a first loop of inquiry. It is the first I have ever done and so represents learning by doing rather than a finished product.

At this point I'd like to invite you, the reader, to put on the DVD with the 11-minute story of the learning history workshop. It is supplied in the appendix.

The learning history workshop – a digital story

Now watch the 11-minute digital story:

The Learning History Workshop

This is a QuickTime movie, which is on the DVD supplied in Appendix F as additional material. It should play on all PC/MAC platforms. To play it you need the latest version of QuickTime (currently 7) which can be downloaded from

<http://www.apple.com/quicktime/download/>. The sound is poor and it may best be listened to with headphones or speakers.

Reflecting on the digital story experiment

Diving in and doing this digital story has been an intense and a rewarding experience. It has been interesting to observe the intersection between my learning of how to operate the technology (I used Imovie for the first time) with my learning on how to use a new form of presentation. In fact the two were not distinct as I blundered forward, cowed by technical difficulties, some of which were too time-consuming to overcome. The movie crashed over and over again as I imported pictures. The audio clips from participants were not quite accurately cut. And the sound levels of my audio voiceovers were problematic. Some of the voxpops are drowned out by the music. It is a little long. Were I to do it

again it would be different. I would change the tone of the voiceover. It still somehow sounds like a singsong victory narrative to me though I tried to avoid this tone. I could not quite commit to whether this was a story or a more conventional report. In the end it drifted toward the latter and lost some of its conviction as a result. I would use fewer images and choose them more carefully.

On the other hand it has been exhilarating to express something visually and in a new way. And this has had surprises for me too. When I looked at the finished product I noticed that it had a certain elegance in places that was not foreplanned but seemed to happen naturally through the process. For example I like that the workshop itself only takes up about a third of the movie as this places the event more accurately in relation to all the background work that went on around it. I like how the storyline of reading the histories seems to have emerged as a central thread. I like how the soundtrack of the music fits the story – the first piece is tense and then when the workshop starts the second piece picks up pace and adds the right level of drama. And I like the inclusion of the video clip for what it says but also what it doesn't say: the weary rub of my eye, the slightly manic laugh and the fact that my daughter has been drawn into the whole event and is aware of it. This hints though does not dwell on the private spaces that lie behind any piece of public work. So in summary it has felt like a very creative process. It has been a liberation from the straight-line writing of which there is so much in this thesis. The next cycle of inquiry will involve showing this video to others with my usual learning history questions: what is your interest? What is its relevance to you? But for now it serves as a first attempt to tell a complex story in a new way. It represents a part of my learning history and in its form illustrates where my inquiries on form and method have led me.

Reflecting on the workshop

In this section I will reflect on the workshop in terms of the event itself. A week before it my colleague Gill asked me: 'what would the event be like for you to feel it was a great success?' I replied that there was a hierarchy of success. First, people needed to turn up! After that I was looking for engagement, lively conversation and a sense of something new happening. And lastly I wanted people to learn – though I was not sure how I would know if they had. It was hard to put into words what my hopes really were. I

was genuinely interested to see how the design, that was the fruit of so much thinking and so many discussions would play out. Success had something to do with how it did.

In the event my hierarchy of success was traversed. People did turn up. And once I had done my presentation I could settle into watching for that quality of engagement. I watched out for lone, bored faces. For silenced voices. For domineering characters. And I noticed laughter, eager anticipative faces, informal conversations between old friends and quiet tête-à-têtes between experts and newcomers. There was a good quality of participation I concluded and when I look at the pictures I feel this comes across. That something I had been looking for happened – in my gut the event felt very successful.

In March 2008 the Lowcarbonworks team collectively reflected on the event during a project meeting. I taped that session and I will draw it now into my more structured reflections on what worked, what didn't and how the design played out.

The design had sprung to life exactly as planned in some places and unexpectedly in others. The gamble of the 'big read' had worked, we all agreed, to set a reflective tone for the whole event. The move from the quietness of that read to small conversations worked exactly as intended guiding participants forward from individual to collective reflection. The graphical facilitation also played the vital role as hoped. Together with the learning history booklets the posters enlivened the workshop aesthetically. On a deeper level they reflected a presentational way of knowing that was consistent with the overall message of the workshop. In places the design exceeded my hopes. The analytical work where everyone approached the thematic graffiti wall was high-energy and exciting in a way that delighted me. My colleagues echoed the positive liveliness of this activity and said it was a good example of a major strength of the event which was that the material was mostly self-generated and participative. In this way experiential, propositional and presentational knowing were being brought together in a fresh way. The rhythm, the movement between elements of the workshop flowed well mostly though not always. A large group exercise where participants first created posters about each of the five histories in small groups and then milled around to look at them had been a little confused. Though the photos capture some great moments during that exercise, I doubt that the original purpose of using the posters to communicate about the different learning histories was fulfilled. Overall there were possibly too many elements. Mixing 'story' and

'analysis' may have been an elegant plan but in practice it meant time was short. My action research colleagues noted that though the "story circles" did surface interesting vignettes these might have been fruitfully built upon. Instead we moved swiftly on to analytical work. Finally we all agreed that the closing session "best foot forward" had fallen flat. In it we had asked participants to reflect individually: what can I do next? And what can we ask others to do? Colleagues noted, and the data I gathered confirmed this, that people lapsed at this point back into simpler quick statements. We agreed this did not do justice to the event that had just taken place. Chris put it nicely when she said that the challenge is: 'how to hold their feet in the fire' and suggested that some reflective writing might have been more appropriate. I agree. But writing this I recall how by the time we got to this exercise, people were ready to leave. Would they have had energy to force themselves back into a quiet reflective space? Or should we just accept that closing this kind of event can have no happy ending? It will always involve participants looking at their watches with their minds wandering back to the world they are about to step back into. My conclusion is that a simple closing ritual might have been best.

Overall my colleagues and I felt unanimously enthusiastic about the event. We all agreed that an unexpected pleasure from the whole experience had been coming together as a team to work together in the world. I echoed this feeling strongly. Working collaboratively with Geoff, Chris and later the whole team was intensely rewarding and deepened my relationship with my colleagues as well as with the original research participants who turned up on the day. This was one of those side effects that caught me unawares even though I was the one who was writing and opining about the power of coalitions and collaborative leadership.

I have tried to reflect in a balanced way about the workshop. Yet I read the enthusiasm with which I have just concluded and pause now...wanting to temper this fanfare. What might have been different? I wonder if I might have been braver? Might I not have tried to convene a larger group of people so as to make more of a difference in the system? The moment of resolve that led me to think big in the first place was good but did I hold that resolve sufficiently? I struggle to balance this kind of reflection in. I am proud of what happened and what we as a team achieved. And at the same time I want to make sure I am telling it for what it was. Another workshop; another event that did make 'a buzz'

alright but that buzz eventually just faded away. Scope broadened for a moment. But did anything scale out from this? What, if any, were the enduring consequences? With this question I think we start to look at where scope meets scale.

Reflecting on enduring consequences

The event ended on a high with a flurry of warm goodbyes and plans to stay in touch with each other in the future. I had decided not to ask for feedback forms. Expecting a complex experience to be evaluated in terms of flat soundbited feedback just didn't seem congruent. Nor did I want to be seduced by enthusiasm at the point of departure. It meant little in terms of actionable learning. I planned instead to put a reflection point in three months afterwards so that participants could better gauge if they had they actually done anything as a result of the event. The workshop had surely increased the knowledge in the system about the five learning history projects. It had amplified these stories. It had also created some kind of learning experience for participants. But I wondered what scope did this step up to the next level of inquiry really have? Had it any consequence beyond the event itself? And was it of consequence to any people other than those who attended?

There were some immediate consequences. Jane and her boss David from B&NES had attended and, riding on their enthusiasm, the B&NES small group work was immediately confirmed. Discussions between Jane and I took on a new vigour as we both sensed a real opportunity. I know too that some participants did also stay in touch with each other afterwards. So new connections were made.

My approach to the research was also immediately impacted. Enthused by the energy of the workshop and keen to keep that momentum of increasing scope going, I embarked on a new experiment in learning history that would sit between the second- and third-person domains. My original plan had been to write up an institutional learning history of our joint workshop explorations and to send that to participants. However on my return to my desk I decided instead to experiment with writing this up as a live blog website and putting this in the system²⁰. This would be a 'live' and participative learning history that

²⁰ http://academicmum.typepad.com/lcw_learning_history_inno/

would unfold more openly by offering participants the opportunity to join in *as I wrote*.

With the website I was deliberately applying that push-pull energy of open system working. I would be making visible to the system my research process and the discussions that had taken place with one constituency of stakeholders. I hoped this discussion might continue and that, by revealing it, other stakeholders might be drawn into it in a way that would improve the overall quality of participation. For example I had audiotapes of the short 3-minute stories that had been told at the workshop. I arranged to get them transcribed and planned to share them back via the website. These might evoke further conversation among participants I thought. And they also might create further conversation in the system. Together with the iconic histories these stories would form an even more robust platform for celebration and inspiration. I liked how this possibility linked to the design principles of the workshop. It felt elegant to me. In short I was excited by all this congruence, challenge and possibility. It was interesting to explore this new form and I went at it with gusto. Two months later my website was ready to go live:



Figure 28: The institutional learning history - as a website

It was at this point I asked participants for their reflections on the event. Only four of the original 26 participants replied, though all very positively. One wrote:

The event was a huge inspiration. On my return prompted by the opportunity presented by the “Big Green Challenge” (a £1 Million prize fund for innovative community carbon reduction projects) I persuaded my local Parish Council to back a local bid. I organised a meeting in Flitton Church Hall and to my surprise the hall filled up with people and we brainstormed 50 ideas for reducing carbon in the Parish. I filled in the on

line application form only to find that we were the 700th applicant. Our chances of making it through to the next round seemed slim. But we have just heard that we are through to the last 100 communities and we now need to firm up on our ideas and seek match funding.

Participant feedback (via e-mail), June 03, 2008

One reply was left on the website from a participant from Southampton:

Impressed by the learning history and the Feb. workshop I have used the example as part of our Big on Energy conference (9th June) which showcases the Southampton District Heating project nationally. My intention is to highlight how partnerships develop and what has to be done to sustain them to achieve results rather than simply list what we did.....ensuring that 'things that happen' always lead somewhere.

Participant feedback (via website), June 03, 2008

What sense could I make of this? Few people were willing to reflect a few months after the event. Those that did offered rich and valuable reflections citing actions they had taken as a result. Overall they described themselves as having been inspired. On the other hand website conversations between participants did not break out as I had hoped. I monitored hit rates and was surprised that even the photo albums were not overly browsed. I had expected that people's curiosity or even vanity might draw them back in to look at the photos.

I could only conclude that the space opened up by the event had now closed off again. And this makes perfect sense, reflecting as it does the initial challenge the workshop was trying to address: sustaining energy. Here I was at another level of the system, again doing something unfamiliar and without real formal backing. It had no reality unless I kept saying that it did. I reflect now that all this work has indeed been like an appearing act but one that will always be cast in the light of its inevitable disappearance. The trick is to keep things in appearance for just long enough to make some kind of a difference.

Feedback from a further participant illustrates this point well:

It is interesting to note that I left the workshop with a buzz that lasted for a couple of months, far longer than I expected and longer than any other workshop I attended but now that buzz has subsided I find myself wanting another fix - to renew the excitement and enthusiasm I felt through the energy of the group and the learning that evolved.

Participant feedback, May 2008

Without sustained energy it seems, the energy for change will eventually subside. This affirms the earlier discussion of the problem of the single case and the limited potential of a single event for lasting change. It was experiencing this limitation in practice that made me particularly determined to work over a sustained period with B&NES.

On the other hand steady hits over months on the website indicate ongoing interest from somewhere in the system for this work. However this seems at best unpredictable and the level of engagement shallow. Few, if any, browsed into my more reflective pieces on questions bubbling up from our findings²¹ so the collaborative inquiry I'd envisaged on these points simply did not happen. At one point I saw how one of the stories was getting a lot of hits and then noticed ruefully that its title was: "Long Distance Intimacy". It was a short account of the benefits of videoconferencing technology in reducing business travel though I suspected some of the web searchers had been searching for a more salacious tale.

So my second- to third- person experiment was not working as I expected. At a certain point I decided not to go on populating the website in the way I had originally planned. I re-privatised my research processes and dropped – for now – the idea of an online conversation around an unfolding piece of collaborative research. Instead I put my energy on the website into making it an inviting and engaging piece of communication – almost as a piece of marketing. This 'failed' experiment contributes to other experiments with online communities and networks over the past years from which I am gathering a

²¹For example this entry that asked [Do we have time for setbacks and lulls?](#)

wealth of evidence that online communities are difficult to get to work.

The website now exists as an artefact from my work. It is in the system and I monitor hit rates on it. At time of writing (early 2009) these are averaging at about a dozen a day and peak sometimes towards 50 (see Figure 29 below). I have had some interesting approaches out of the blue as a result of it. Only last week I was contacted by someone inquiring for more details about one of the short 3-minute stories that had been told at the workshop and that was published on the website. Spikes occur from time to time when the work is published or described elsewhere.

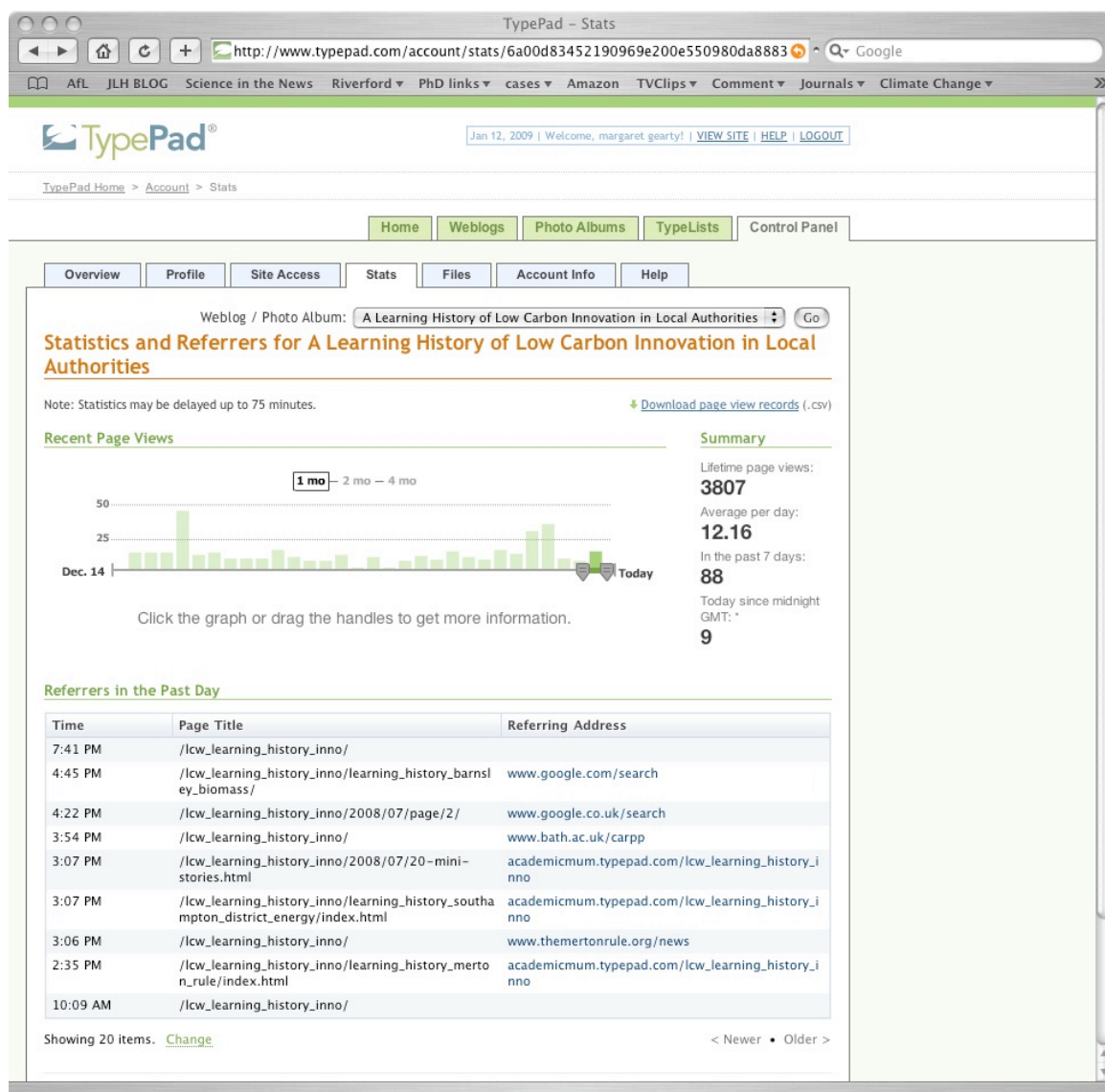


Figure 29: Jan 2009. Hit rates on the website Dec08-Jan09

Summarising reflections: scope and scale

The workshop and the website after it successfully broadened the scope of the learning history by increasing the participation in the research and extending wider invitations into it. In this way the stories were amplified much more broadly in the system and further stories were added. However the challenge of sustained engagement that had dogged me at the organisational level followed me up to the systems level. I found that here again the scope was only as wide as the energy I was willing to put into broadening it. I wondered how there might be enduring consequences if, like a spinning top, I always needed to pump it to get it to spin. I reflect now that the broader scope I achieved resided largely in the second-person domain, though of course I cannot be sure of that. Scale, as I understand it now, is achieved when the face-to-face encounters of the second-person lead to self-sustaining and self-generating occurrences beyond. This did not occur with my work. So I distinguish scope as being necessary but not sufficient for scale. Scaling occurs when the scope is sufficiently broad through connected sites of activity *and* some other alchemy occurs. Perhaps this is the connection I referred to earlier. Though a small research project cannot create a whole new movement it might, by connecting its sites of activity to ongoing similar sites, still contribute to scale in a helpful way. I think it would be an interesting further line of inquiry to look in more detail at making this kind of connection with a view to contributing to scale.

Away from the field of local government, the learning history workshop also had rich and interesting consequences for the research itself as it generated some interesting new lines of inquiry on method. One of these in particular linked to the form as the next section will describe.

Inquiring into Form

I had started with a theoretical question mark over the effort involved in writing a learning history. Chapter 4 explained why my single learning history needed to be less time-consuming to create than the MIT version of learning history. That chapter also explained my commitment to narrative. These two factors together implied that from an early stage in the research there was an inquiry as to what form my written learning histories would take. In Chapter 9 I will describe in more detail how a commitment to story influenced the written form. More broadly though there were principles of learning history form that were not just confined to how it was written but applied more generally to how I went about my work. My concern with congruence led me to be exploring these principles from an early stage. So for example in December 2007 when asked to talk about my work to MSc students at Bath I had done a 10-minute learning history type presentation on Merton. I had used my voice to narrate the story against a background of timed images and quotes. This went down well. What I saw then as being congruent, I see now as an articulation of another kind of learning history 'event' the form of which adhered to some generic principles. But it was only really through the design and experience of the workshop that I started to see that learning history form applied to the work overall. Learning history did not need to be so distinctly split between 'artefact' (with form) and 'process' (without). Different events or media could be part artefact, part process and as such these might carry the essence of learning history form. With the workshop I was starting to articulate what that essence might be:



The characteristics of a learning history (independent of the medium)

- It tells a jointly told tale or tales
- There is a storyline that links the stories in some way
- It has humanity and dwells in the messy complex detail of human experience.
- It represents the voices of others – directly or indirectly
- It mixes story and analysis
- It distinguishes different kinds of voices by naming them (reflective, analytical, theoretical...)

- It mixes different forms of visual, aural and written presentation

My inquiry on form was gradually liberated from being just about the written learning history artefact and more about the essence of the approach. With the creation of the blog website to chart what we had learnt together at the workshop I was exploring the online form of learning history. Though I didn't write them down at the time I realise now that it the above set of characteristics had guided my choices as I structured and designed the website.

In the wake of the learning history workshop, a buzz started to build up around learning history within our wider research community about the different ways it might be used and this started to blossom into a collaborative inquiry. A friend and colleague Paul Pivcevic and later other colleagues at CARPP wanted to explore how learning history might be reduced down and made more portable so that it might be effective more quickly as a vehicle for learning in other action research and consultancy programs. It was here then that the inquiry into scope started to meet questions of form. The push to develop a quicker form of learning history than my single learning history form interested me. If the form could be further distilled, then histories could be created more quickly. More might then be linked together and amplified into the system thus broadening out the scope. But I was concerned too. Had I not already gone far enough cutting down learning histories? Paul's question was partly but not wholly motivated by a pragmatic desire to operationalise learning history more effectively but also, as importantly, with less cost, to use on action research programs. Embedded as I was in the research I had mixed feelings about reducing the 'cost' of learning history and so the enthusiasm with which I entered into these discussions was accompanied by a degree of high-minded commitment to retaining the purity, as I saw it, of the form.

So it was a blend of questions, thinking and events that led this inquiry into form forward. My colleagues' questions on portability met my questions about scale, form, congruence and myth and pushed me to consider just how reduced a learning history might be. And this was a question that colleagues and I explored with action researchers at the Emerging Approaches to Inquiry Conference at Hawkwood College in September 2008. At this conference participants were invited to create short, rough-hewn learning histories in a matter of two days. The learning histories were not written but were short

10-minute multimedia presentations the exact form of which could be chosen by the participants. I will only allude to this exploration here, showing a picture of it in action, rather than describe it in full. I mention it to point at how the inquiry into form rolled forward, drawing other people in and linking with other colleagues' questions.

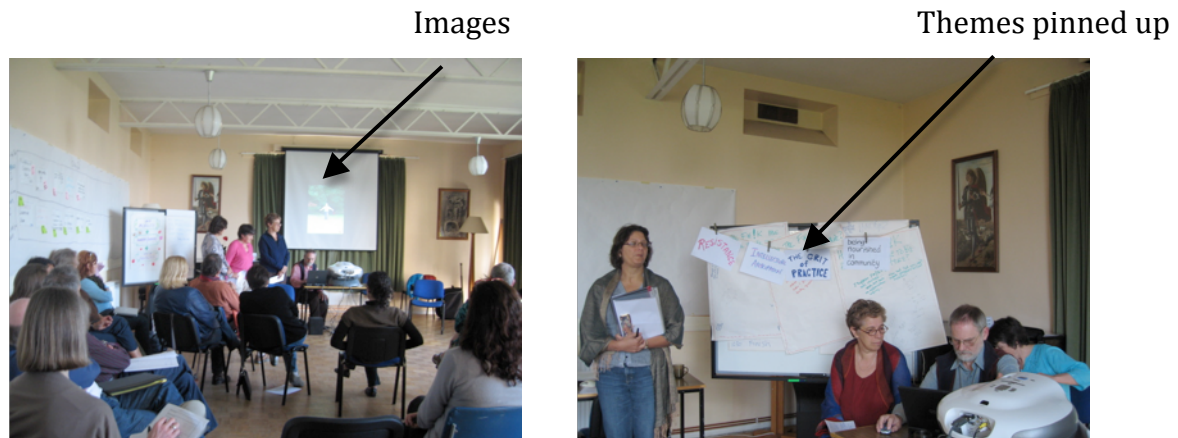


Figure 30 New kinds of learning history 'events' at Hawkwood in September 2008

With this experiment we were really starting to play around with the boundaries of learning history and what is possible (and not possible) in a situation with minimal support and little time. From this, and from other discussions and sites of inquiry not described here, I have come to the conclusion that the creation of a learning history 'event' (be it a presentation, a document, a film or otherwise) does require craft, some time, some skill and dedication to a storyline especially if the intention is to communicate to third parties. Quality of the 'event' needs to be assessed in relation to what the project has set out to achieve however. If it is intended that the learning history process will produce a meaningful vehicle to communicate learning and information to others then more craft is required. However not to be underestimated is the learning to be had from engaging in the process itself. At Hawkwood, the final presentations of the short learning histories created by participants were kaleidoscopic and sometimes confusing in terms of what they conveyed. What was striking however was how, by engaging with the exercise, participants honed in on some of the key ethical questions I had been grappling with for months. For example, after just two days, rich ethical and methodological conundrums like: whose voice counts, how to present a diversity of people's voices, how to invite participants in and how to conduct an analysis were surfaced and brought to life by participants. This experiment highlighted that working with the form of learning history can itself be a rich learning process and one that is, to

an extent, independent of the final artefact.

In late 2008 a research program called Appetite for Life kicked off that proposed the use of 'a kind of learning history' to share snapshots of the experiences of children in secondary schools in Wales in relation to food. I am participating in this project which is being run by Paul and our colleague Sue Porter. With a team of some twelve action researchers we are exploring new forms of portable learning history that might work in this context. As ever I hold on to some of my high-minded ideals about purity of form and the tension for me is trying to understand when I am just being high-minded and when I need to be high-minded. The inquiry goes on.

Summary

This has been a complex chapter. At the heart of it has been the learning history workshop. But surrounding that is a discussion of questions on scope and form that have woven across it. I have shown the learning history workshop as a digital story to show what the event was like but this 'showing' also illustrates where my inquiry into form has led me which is to look at the crossover between digital story and learning history.

The workshop event has been judged (by me) to have been successful as a piece of second-person action research. However the use of the website to bridge from this into 3rd person action research is judged to have been less successful, at least when judged against the original purposes of enabling wider change at the system's level. In the next chapter I will discuss quality in the research and how it relates to declarations of 'success'.

By drawing into this chapter a discussion of learning history form, I have shown how events and inquiries overlap in sometimes unexpected ways. From the learning history workshop came new questions about form and methodology. So not only the content of the learning histories were amplified at that event but also the approach itself. This surprising consequence brought questions of form and scope together. By exploring portable forms of learning history, new avenues for broadening its scope continue to be explored in an enduring way.

6. Questions of Quality

If the purpose of this research is to use learning history at an institutional level in order to aid learning and change toward a more sustainable future then the quality of what I have done might surely be defined in terms of the simple criterion: has learning and change occurred in the field? This question is misleading in its simplicity however. This is action research, built on a systemic rather than a linear 'cause-effect' view of change.

Consequences, intended and unintended intertwine. What might support the learning of some participants might compromise my ethical responsibility to others. And as the last chapter showed, consequences are anyway difficult to assess. Action in the field has meaning sometimes when there is no evidence to confirm it. Nonetheless the field does offer up evidence if I can only know how to interpret it. In this chapter I consider questions of quality in relation to the overall purpose of creating learning and stimulating practical change through my work. Starting with a discussion of quality as it is described in the action research literature I will go on to derive a set of personal criteria that helped guide me in the conduct of my research and in my assessment of its quality. These build on the quality criteria of presentation that were introduced in Chapter 1 as congruence and elegance.

Quality in Action Research

Quality in action research is a difficult area to address because of the very nature of this type of research. Most quantitative and some qualitative social research sets out to create knowledge by following some version of the scientific model of experimentation. Field research is set up in relation to a question or hypothesis. From the data that is gathered new knowledge can be deduced/induced or inferred. Quality then can be defined in terms of how well the experiment is conducted. Criteria like 'rigor' and 'relevance' (Dodge, Ospina et al. 2005) or, for example the double hurdle of 'rigor' and 'scholarship' (Pettigrew 2001) can variously be applied to a piece of research to judge its quality.

However as Chapter 4 outlined, action research is an emergent process. There is no sense of research as a single controllable experiment. Rather it is an unfolding process, which the researcher must navigate, rather than control. And it is participative: the researcher is embedded in the field of research rather than distant from it. Value, learning and knowledge is sought as much for co-participants in the research as it is for the wider field of academic knowledge (Heron and Reason 2001).

The implications are that quality in research of this nature needs to be rethought entirely. And action research scholars have been doing this. Dawn Chandler and Bill Torbert have characterised the wider focus of action research in relation to standard research by setting out their 27 flavours (Chandler and Torbert 2003). They describe quality in action research as coming from how these flavours are differentiated and integrated. The 27 flavours come from looking across the dimensions of time, voice and practice in any research and the researchers stress particularly that the present-future orientation of action research is a dimension that is often absent in other forms of research.

We propose that quality in action research (and in all social science, once we understand action research as ubiquitous) increases: first, to the degree that the research clearly differentiates and integrates subjective (first-person), inter-subjective (second-person) and objective (third-person) voices; and second, to the degree that the research clearly differentiates and integrates past (t1), present (t2) and future (t3) temporal dimensions.

(Chandler and Torbert 2003 p.147)

This proposition links quality to scope and breadth in the research and it is helpful in acknowledging the multi-faceted nature of action research. I find it consoling as it helps me to make some sense out of the chaos I sometimes experience when I try to move between the different layers of inquiry in my work. So it helps me to locate my work. However I balk at working out validity criteria for each flavour as is suggested at the end of the flavours paper. The typology suggests to me instead the need for some guiding principles that might apply to all flavours.

Other action research scholars have been working to describe more holistic principles. After exploring the trend of the debate on quality and validity in qualitative research,

Peter Reason discusses the practical nature of action research and its relation to worthwhile purposes warning that it is neither simply about what works nor the pursuit of getting things right. There is a naturally improvised aspect to action research and unlike scientific research:

Our actions and our purposes are not discrete experiments but part of the emergent process of life

(Reason 2006 p.189)

This discussion leads to his conclusion that quality in action research will:

... rest internally on our ability to see the choices we are making and understand their consequences; and externally on whether we articulate our standpoint and the choices we have made transparently to a wider public

(Reason 2006 p.190)

This sentence can read a little flat to a researcher setting out and looking for well-defined quality criteria by which to guide her research plan. It did to me 3 years ago. And yet, reading it now, I find it positively scintillating! The greater has been that experience it seems, the more I can relate to it. Similarly, in a 2007 paper, Marshall and Reason helpfully build on the 2006 paper describing the 'attitude of inquiry' as the process that underlies the making of quality choices in action research (Marshall and Reason 2007). In this paper they tentatively suggest some of the characteristics that might be associated with such an attitude: curiosity, willingness to explore purposes, humility, participation and radical empiricism. They describe too the disciplines of an inquiring practice. Reading these characteristics and disciplines in 2009, I reflect that these too are alive with my experiences and conundrums. For example Marshall and Reason describe one characteristic of this attitude of inquiry as follows:

Radical empiricism acknowledges the paradox that the world we inhabit is largely created by our language and perspectives while at the same time being utterly unknowable.

(Marshall and Reason 2007 p.373)

This description articulates the tension I feel right now as I write when I attempt to understand the consequence of my actions whilst knowing I can never understand these

fully. And when I go on to read the disciplines of inquiring practice as set out in this paper that include: *developing capacities for multiple ways of knowing, enabling participation to generate high quality knowing* and so on, I catch myself reading and mentally ticking off: 'yep - I have several examples of that '. I do this of course with the further desired discipline: *'a sense of self-irony, playfulness and lack of ego-attachment!'* (p.374)

Yet had I set out at the start of the research to develop such disciplines I think that, as with the earlier statement on choice I would not have known how to start. So the criteria fall short as a starting guide for a practitioner. There are two possible reasons for this. Firstly it is possible that these kinds of criteria are oriented at assessment rather than guidance. They come from those in action research education who need to be able to find general ways to assess a piece of work that has taken place. This might then account for some of the retrospective feel to these criteria. For instance my 'curiosity' is something that can be externally assessed but it is not something I might easily acquire. This links to the second point which is that an 'attitude of inquiry' is not something that can be acquired like a skill in a vacuum. It is a discipline, a state of mind even, that can only be cultivated gradually through experience and in the context of a inquiry that has a particular set of aims and a particular set of procedures. The acquired discipline is in turn shaped by the context in which it is developed. Guidelines or quality criteria for inquiry can then only take on life when they are complemented with and, to an extent, tailored to a specific inquiry. This might account for them only making sense to me when I've done some action research. Quality then in action research seems to be personal and context dependent.

The literature can only point at principles and offer them tentatively as helpful and echoing this view ultimately Marshall and Reason caution that:

The criteria used to judge the quality of action research are in no sense absolute, rather they represent choices that action researchers must make – and then articulate – in the conduct of their work (Reason, 2006).

(Marshall and Reason 2007 p.370)

It dawns on me then that quality criteria in action research have to be personally defined. The researcher needs to fumble and grope her way toward these quality criteria while

simultaneously fumbling and groping her way with the procedures she adopts to meeting her continuously moving purposes. Torbert's writing on the four territories of experience is helpful here in linking research procedures and purposes to quality (Torbert 2001). He has conceptualised action inquiry as a bringing together of four territories of experience which break down as follows:

Visioning: The spiritual territory: exploration of one's intention or purpose in the world.

Strategising: The mental/emotional territory: planning to act in the world.

Performing: The embodied territory, acting in the world.

Assessing: The external territory: listening to the world.

The territories of experience are very helpful as they lay out a research procedure and in the 27 flavours paper, Chandler and Torbert remind us that the four territories of experience are another good way to assess quality:

However, engaging in a greater number of the 27 flavors of action research in a given project is not the only criterion of quality in action research. Critical to understanding research in the present and future times are the four territories of experience, from attentive visioning through assessment of effects in the outside world. At any given moment, vision, strategy, action and outcomes are either in or out of alignment. We propose that single-, double- and triple-loop feedback progressively give a person, team or wider organising process increasingly sophisticated capacities for quality action research that leads to increasingly frequent and immediate changes toward more timely action

(Chandler and Torbert 2003 p.147)

Here I understand quality to be conceptualised as an agility of practice. What Chandler and Torbert call 'timely action' relates to how well the researcher moves across the territories of experience and adjusts visions as she goes. The idea of inquiry as an ongoing practice of trying to align these territories catches for me the improvised and emergent nature of action research whilst allowing for the fruits of an endeavour to be sought through quality processes of inquiry. Experiments neither fail nor succeed. But quality comes from asking why they took place and what re-visioning might occur as a result of them. With this perspective quality comes through practice and might be achieved by an ongoing and personal cultivation of an 'attitude of inquiry' to support the

timely traversal of the territories of experience so that our changing visions and overall purposes can be met.

Finally, lest quality become an end in itself, it is Hilary Bradbury who helps me to relate quality back to the purposes of the research. Drawing on the pragmatic tradition, and writing specifically about learning history, she says that quality might be conferred if the learning history has led to actionable learning for those participating in it (Bradbury in (Roth and Bradbury 2008)). In other words has the process added value for them? Has it supported participation and partnership? Has it left them stronger when it was over? (Ibid p.360) These questions echo the simple statement of quality with which I started and will be reflected through the thesis in my reflections on enduring consequences.

In this section I have looked at quality in action research as it is described in the literature. By relating this to my experiences over the period of my research I have observed how these descriptions do not instruct for going forward so much as affirm in retrospect. There are no off the shelf answers as to how to 'do quality' though there are plenty of guidelines and maps to support the development of one's definitions and criteria. In the next section I will set out mine. Curiously many of these become clearer in retrospect suggesting that cultivating practices of quality starts with not knowing and leaping into experience. . I am happier to think about this paradox at the end of my action research project than at the start! But perhaps it explains why I have shuddered sometimes at the mention of quality these past three years.

Personal Quality Criteria

In this section I will propose a number of criteria that emerged as important for me to ensure quality in the action research I was conducting. These criteria have changed, been enriched and developed as the experience of the research has gone on. I have always been working to some version of them. Together they represent for me what is an important though nebulous idea of integrity that I have always had in mind whilst making critical choices. These criteria have already been implicitly illustrated in Chapter 2 when I reflected on how I scoped the field for projects to feature in the research.

Now I will explicitly introduce each criterion and relate it to the literature of the previous section. I will then draw from my description of the learning history workshop of the previous chapter to set out a simple illustration of each one.

Criterion 1: Quality as Watchfulness

The first criterion I identified was early in the research process and it related to Reason's general guidance – discussed in the previous section - that quality relies on the way we make choices, assess them, articulate them and react to their consequences. From this reading came a commitment to what I called transparency of choice. I wondered how might I cultivate an ability to see the choices I make? My personal explorations of decision-making processes (described in Chapter 3) left me under no illusion that many decisions I might make would be implicit or presumed.... *if I didn't watch out*. As I believed choice to be more tacit and less rationalised than perhaps commonly thought, transparency of choice demanded in turn a certain '*quality of watchfulness*'. This chimed with conclusions I'd reached at the end of my MSc when, after several cycles of trying to capture 'the best way' for me to do first-person inquiry, I threw my hands up and concluded that it would always vary but that overall it amounted to being watchful of what I was doing and why (Gearty 2006). At different times, the way of being watchful will vary, but the spirit of watchfulness is about staying awake to the choices that are being made and the feedback that is coming in from the system. This echoes with ideas from narrative inquiry that it is

Wakefulness that ...most needs to characterize the living out of our narrative inquiries

(Clandinin and Connelly 2000 p.186)

This criterion brings awareness to the discipline of “*engaging in, and explicat(ing) research as an emergent process*” (Marshall and Reason 2007 p.376). It relates too to Torbert’s ‘assessing’ territory of experience. As an action researcher I did not have the luxury of a consistent narrative for my research – I had to let it unfold and keep watch over what narratives were emerging. This quality might be summed up by the old adage to ‘expect the unexpected’. In both my inner and outer worlds, watchfulness was needed to help me to see past the screens of static expectation and so to be receptive to what the world might really be telling me.

An illustration

In early December 2007, Geoff and I sat in my study planning the workshop. We had a handful of sign-ups and no more. “There’s no point in designing this”, said Geoff, “if we’ve got nobody coming”. As we discussed what to do, I checked my mails and found a message from a contact announcing that five people from a nearby local authority would be attending. These included three officers and two elected politicians. Geoff and I cheered instantly. But then I remember saying – ‘wait – do we want so many from one local authority and do we want politicians?’. We went on to discuss this much more strategically and came to a decision as to how to reply. This was an example then of being watchful and trading off my desire to get anyone in the room, with the overarching vision of getting ‘the system’ in the room. I needed to be watchful to check that I was discerning between the two.

Criterion 2: Quality as Postheroic Narrative

Linked to the first criterion was a second that is in its way a special case of watchfulness. It has to do with how I articulated what I was doing to myself and to the field. Again, quite early in the process, I had a strong sense of wanting my research to achieve quality by having integrity. Though what this meant was as yet nebulous, I had some feel that integrity included holding on to some core purpose in the research and not getting completely sucked into what was happening during the emergent process that would undoubtedly unfold. I was particularly aware at this time of the dangers that might lie in getting wrapped up in my own heroic narrative. There would be a tendency surely to airbrush out some of the mess, to postrationalise it into a glowing success and in so doing compromise the integrity of the research. I called this criterion '**quality as postheroic narrative**'. Clearly it links to my search for congruence and the desire to keep faith with the ideas behind learning history that suggest a 'human' rather than a 'sanitised' account. But this criterion relates not just to how I give account of the research. It has also informed how I go about it. Reason and Marshall describe humility as a characteristic of importance in an inquiring researcher. Humility for them is about accepting:

the limits of our current knowing, recognizing that we do not understand or know how to do something

(Marshall and Reason 2007 p.372)

In my actions from moment to moment I have aspired to create a narrative that is postheroic. So I have tried to pay attention to how I am shaping my research story and what I am choosing not to include and why that might be. So I recognise that overall there is a sense of contingency about anything I might narrate. I am solidly with Bateson's view that what the conscious self might report will be an edited, partial view of the world to suit its own purposes (Bateson 1972). Such a view drives me into the arms of humility – it is a place I am actually quite comfortable. Holding an ironic position in relation to all my endeavours is a long-held personal habit. So the question for me is more how to take my endeavours seriously enough, to actually stand up for them as though they were really important whilst also staying distant from them. Early on in my research I posed a question that has been with me the whole way through:

How do I maintain dispassionate passion in my research?

This is about the nature of my humility perhaps. I have a style that can be irreverent; I use humour frequently to connect with people on a different level, to humanise an encounter but also because, quite simply, I enjoy laughing. It is like oxygen to me. The question for me is about keeping this *irreverence tender and timely* in what I do. In terms of quality as a postheroic narrative, the search is to 'keep it real' with the help of my dispassionate clown and my earnest and passionate achiever. Is this the dilemma of the posthero?

An Illustration

At the learning history workshop there was one participant who clearly did *not* enjoy being sat down and asked to read the learning history. He objected loudly at the end of the big read and wrote quite offensive comments in his workbook. This is a long story and one I ultimately chose not to include. When rendering my account of the learning history workshop in the last chapter I continually paused to check what it was I was not saying. Sometimes I made this pause explicit, checking for any reluctance and looking for balance. This kind of pause is a familiar practice to me in what I say and do. In my description of the workshop I tried to balance what worked and what didn't but I also wanted to make the balance representative. So in the end I took the story of the irritable learning history participant out. His reactions provoked me emotionally. There was drama in it too. But when I reflected on it I realised his behaviour and comments were not representative of the day. To dwell on them would have added dramatic content but would have skewed the story. It would have created an anti-hero. So it would have gone against my postheroic criterion that calls for balance and reasoned interpretation.

Criterion 3: Quality of Achieved Alignment

The third criterion relates particularly to Bradbury's pragmatic definition of quality as being actionable. It comes too from recognising that quality comes from the old-fashioned concept of hard work. I wanted to define a criterion that sits with the paradox that striving towards excellence and results is of great value even though achievement and outcomes are questionable aspirations.

Inasmuch as there are question marks over whatever account of the research I might give, equally there are question marks over any consequence I might want to ascribe to the actions I have taken. I do hold the view that these consequences are to a large extent unknowable. This is not only at one with the point made earlier – following Bateson - that my conscious mind will skew what it sees according to its purposes. It is also because of the systemic nature of action research where I am participating and embedded in an interconnected network of co-subjects. The meaning of individual agency is questionable in such a network. My actions insofar as they do have ramifications will be continuously translated in their meaning by my co-participants in the wider field. Therefore ascribing consequences to my actions at a systems level has little meaning. It seems grandiose of me to even discuss it. This is the paradox that is acknowledged by the earlier described quality of “radical empiricism” where we are exhorted, despite the inherent limitation of what can be known to nonetheless try to find things out: to iteratively seek “*confirmation and disconfirmation of sense-making and of positions held*” and to adjust these positions accordingly (Marshall and Reason 2007 p.373). So the unknowable nature of the consequences of many of our actions cannot be an excuse for ignoring those consequences altogether. I mentioned the achiever²² in me in passing at the end of Chapter 4 and this has particular relevance here. What consequences I can know, however limited they are, must I think be passionately pursued by my achiever and celebrated for what they are. This is the only way I can find

²² With the word achiever, I am reluctantly borrowing language from Bill Torbert and David Rooke's typology of Leadership most recently published in (Rooke and Torbert, 2005). They define 7 action logics through which Leaders might progress. The 'achiever' action logic refers to 4th stage. A person with this action logic succeeds in conventional terms. They perform well and get results. However the achiever is sometimes limited by not questioning the underlying frameworks that set the goals they achieve. Though I have disagreements with the hierarchical framework I find the language invades my thinking in a useful way!

to bring hard work and endeavour back into my action research and escape where I find myself most comfortable: sitting, reflecting and commentating on the fence. Saying 'Tant-pis'²³ every time things don't quite go right.

So I am gently trying to reintroduce the notion that striving for results has a place in conducting quality action research. Action research is naturally improvised and experimental. I am interested in finding a criterion that comments on the nature of these experiments: I want to look at their success in quite a bounded way (did they work?) and also more broadly (what learning has occurred as a result of them?).

The best way I have found to describe this - is in terms of Chinese whispers, Torbert's territories of experience and Bradbury's overarching pragmatic goal. Please bear with me! Imagine that, to reach Bradbury's pragmatic goal of actionable learning in the system I conduct action experiments. If each action experiment is understood as a path through Torbert's territories of experience from vision to feedback, then my strife comes from ultimately *wanting* an action experiment to 'work', to 'align' whilst not really minding if it doesn't. One congruent way of defining success - that still allows a system's view of cause and effect - might be when the territories of vision, strategy, actions and assessment reach some kind of alignment. When they do I want to stop awhile and celebrate it as a quality moment.

In the "assessing" territory the researcher listens to the world and tries to understand the feedback from it in relation to that which she originally set out to do (the vision). If the vision is a message passed into the system, then feedback in this case is akin to a Chinese whisper returned from a long line of whisperers. The whisper that returns is often a surprise. But sometimes, it might ring true. We can assess what returns in relation to its life in the system and the original vision. The quality criterion that results is **quality as achieved alignment**. It results from the attempt to line these territories up and a noticing when they do. This carries for me the responsibility to respond rather than just to reflect on the unexpected results of my experiments. It is putting a sense of purpose into my experiments and also gives me a guide for looking at how they are linking together in service of my declared purpose. It allows, however fleetingly,

²³ French for 'never mind'

moments of success to be savoured when the Chinese whisper that returns rings true to the message that was put in.

The criterion of achieved alignment is reaching out to words like outcomes and results that are associated with more traditional research. For me these still have a place, albeit a diminished one, in action research.

An Illustration

There was clearly striving involved in convening the learning history workshop. I set out a vision for an expanded workshop in July 2007 that supported my overall purposes of encouraging participative learning in the system. This vision became very consuming. In February 2008 it occurred and, the attendance numbers fed back from the assessing territory that my strategies for realising that part of the original vision had worked. I took the fact that 26 people did attend as concrete feedback that the process of convening and engaging the system had, on one level, been successful. So alignment of Torbert's four territories was achieved at this point, and this mattered to me.

On the other hand when I tried to use the learning history website to influence in the third-person domain it did not work in the way I envisaged. From the way people accessed the website I noticed that 'aligned achievement' was not being reached: or to put it more bluntly my experiment failed. Here I didn't continue striving to make it work. I altered my vision for the website being a site for third-person inquiry and I reflected on how this impacted on the overall vision for the research. This 'misaligned' experiment joins several other 'misaligned' experiments from which I am continuing to learn about the nature of online communities. The quality then comes I think from noticing the misalignment, learning from it and adjusting accordingly.

Criterion 4: Quality as Checkpoints and Evaluation

The previous criterion has proposed that quality has to do with setting off experiments that I want, in some way, to be successful. The fourth criterion has a lot to do with the practical implications of this aspiration. Starting out, I saw quality as being achieved not just by being 'watchful' to consequences but also by being quite pro-active in seeking feedback that would help me to evaluate my research. I put procedures in place to systematically seek feedback so that there would be a consistency, and therefore a quality, in how I was going about my work. Quite aside then from any data they might surface procedural checkpoints relate for me to this idea of integrity. They helped me to ensure that I was treating participants fairly and with consistency. And in Chapter 4 I described how I also hoped that checkpoints might sometimes aid further learning. So I sometimes called them 'reflection points'. Finally there is the data these checkpoints actually surface. This is also of value. Firstly it is consistent and comparable. It provides evidence as to the impact of the action experiment, be it the nature of the question being asked or the mere act of asking for feedback in this way. Secondly it increases the possibility of the 'unexpected'. Taking a procedural approach to gathering feedback leads to questions being asked when the energy the researcher or participants might feel for such questions has long ebbed. If it was not proceduralised then, it is unlikely one might ask. Speaking personally there is often a temptation to be lazy after a high-energy event, interview or exchange has taken place. It can be hard to muster up the energy to go back and ask about it. But often it is by asking from this low energy place that some interesting and unexpected feedback comes in. On the other hand one doesn't want to weigh the research down with unnecessary procedures. The tension between duty, consistency and procedure must be managed. And this is again a question of being aware of the choices one makes. Including this as a quality criterion is my nod at 'rigor' and scientific method in the action research frame. I called it '**quality as checkpoints and evaluation**'. As opportunistic as the 'watchfulness' of criterion 1 is, this criterion is systematic and procedural. It is a safety net. The use of procedure has a place in seeing through the action experiments that make up the research and in assessing just how successful they have been.

An illustration

I described in Chapter 5 how I decided not to get formal feedback at the end of the workshop event opting instead to ask participants about any actionable learning for them three months later. This checkpoint was a more consistent test of enduring consequences but it yielded fewer responses. To evaluate participants' reactions to the workshop I taped short voxpops with seven of them on the day.

I think now it was a mistake not to get feedback at the end of the workshop. True, they may have been of limited value and I would have needed to be watchful not to over-value them or be seduced into a narrative of unequivocal 'success' by them. But they might have helped me see to some of what I didn't see about the event. They would have represented another kind of voice. This was the case with the workbooks I gathered at the workshop. They gave me an invaluable insight into the experience of 'the big read' for participants. 'Evaluation and Checkpoints' are important to proceduralise the research and avoid laziness. However the other quality criteria are vital in helping to guide how to place and process these checkpoints.

Criterion 5: Quality as Brave Consequence

Finally there is the idea of “quality as brave consequence”. Here the discussion on consequences comes together with the ethical aspects of the research. Conducting ethical research means being aware of its consequences for participants and responding accordingly. It connects particularly to questions about transparency of choice and the question of what it is ethical to articulate to the wider field. My early ideas about conducting research with integrity linked to ethics, but whereas ethics connoted ‘standards’ to me, integrity connoted ‘values’. I embarked on the research with the genuine belief that if I treated participants with the utmost respect and dignity, then I would naturally meet any standards that define what is an ethical piece of research. It presumed an attention at all times to the impact of what I was doing. This inversion of thinking was to make quite a difference later on in what transpired. For instance I ended up in an ethically tricky position by using people’s real names in the research. However the safer option of anonymising would, I felt lessen the integrity of the research. So this aspect of quality, I call “**quality of brave consequence**”, is driven by ideas of integrity rather than of caution. Consequence is continuously considered, but it is considered bravely rather than as a means of achieving a safe standard.

An illustration

My account of the learning history workshop describes how, in order to get it to work, I realised I actually needed to scale up my plans for that event. And at a certain point in July 2007 this felt daunting for me. I felt uninvited and small in relation to the field I was trying to influence. So building resolve and undertaking to make that bigger event happen was I think an example of ‘quality as brave consequence’. Though what is brave is only defined in relation to my own demons and perceptions of what feels risky. It is a personal definition. I asked in the last chapter might I have been braver? Perhaps. The bravery I required for an event of 26 was probably similar to that required for 100. However the energy and support required would not have been the same. So matching ambitions, bravery and energy is important. ‘Brave consequence’ feels binary to me – I am either being brave or I’m not. With the workshop I went ‘fearwards’²⁴. Other criteria

²⁴ A term Geoff Mead has used in session when encouraging us in supervision with the writing. He attributes the term to the writer Barbara Turner.

can then be used to judge how well my fearwards move served the purposes of the research.

Summary

This then is a fair statement of where I have got to in my thinking about the criteria of quality that have guided my action research and that I have been using to assess it. I have reflected that, paradoxically, quality in action research is emergent and personal. It can only start to come to light once the researcher gets going. And It can only be personally defined and continually refined in the context of the inquiry in which one is engaged. I have set out five criteria of quality that seem important at the point of writing.

I will continue to refer to these criteria, implicitly or explicitly, as I write though I will not return to assess the research overall in relation to them. Such a move to 'telling' you the research has quality would be inappropriate I feel. It would overly solidify the criteria and it would exclude the reader from deciding for him/herself as to where this work exhibits quality. My hope instead is that through the accounts in this dissertation I am 'showing' quality as it has been described above.

This chapter concludes the delineation of the field of inquiry and practice. In the next part of the thesis I will move to reflect in more detail on aspects of the practice within that field. I will start with a chapter that relates directly to integrity and the criteria discussed in this chapter. It is a chapter that looks in more detail at the practice of being a responsible learning historian.

Part II - Reflecting in the field
Story, Form and Method

7. Questions of Participation and Perspective

Readers of the Merton Rule learning history, depending on their perspective, react to it in very different ways. A reader might in turn be surprised, annoyed, confused, bored or concerned by it. A researcher might be wary, noticing the inequity of how Adrian's account is presented and interspersed with boxes that contain the somewhat dampened perspectives of others who were involved. A community worker in a different field might be distracted by the need for all these different perspectives in boxes, bubbles and reflections. She might just love the story of the cat. An analytically minded sustainability person from the private sector might dwell particularly on the tabulated themes at the end linking them to his experience. A central government person might be upset by the way the main civil servant is portrayed as a baddie. A local authority person familiar with the Merton Rule campaign might be irritated by the grandstanding tone of Adrian's story. And a lawyer might notice the use of people's real names and check the account for libel! All the above examples do resemble characters in real life. They are based on real responses I have gathered from different readers of the Merton history.

In this chapter I will explore some of the dilemmas and challenges that arose from my design of a learning history in an open system. I will look particularly at how the central idea of learning history as a participative and inclusive process of celebration, inspiration and amplification raised tricky questions of power and responsibility in practice as those who participated each brought their own perspective to the process. The chapter will start with my early stance on the validity of the learning histories. I will then show how, by cycling out to the field and reflecting on that, I altered my view of validity as a result and changed the research process to be more inviting and inclusive. The chapter then goes on to discuss the questions of power and responsibility that arose from a second cycle of inquiry before finally drawing what has been learnt into some guidance for conducting research of this kind with responsibility.

Keeping Honest: Starting Stance

With an organisationally situated learning history several insiders are interviewed and the researcher produces an account where these diverse and sometimes contradictory voices are interwoven. There are difficult choices for the researcher who wants to stay true to the data and, at the same time, wants to create an engaging account. Though wider learning might best be served by honing in on a few key events that have dramatic content this might be at the expense of staying true to other events that are less dramatic but nonetheless significant. Roth and Kleiner caution the researcher against setting out what they call the road to demagoguery by cultivating a practice of staying loyal to the data. This requires a regular move from the 'mythic' to the 'research' orientation so the researcher can check she is not mythologizing as she writes.

We realize that taking the mythic perspective may lead us to exaggerate the facts in service of the deeper truth. This can be a road to demagoguery. What, then, keeps us honest? The knowledge that sooner or later we must cycle back to the research orientation and check our 'mythic' assumptions against the data.

(Roth and Kleiner 1998 p.56)

In the organisationally situated learning history the researcher keeps herself honest by checking back to the data. And because that data represents multiple voices and perspectives it keeps itself honest. Usually many people will have been interviewed, so no one voice can run away with the story and get it to serve an individualist strategy for power or any other agenda. There are many voices and when the researcher returns the history to the organisation, this can sometimes, but not always, be a challenging moment and a source of learning when these different perspectives are reflected together.

With learning history in an open system I was judiciously spreading my resources across several organisations and conducting only one or two interviews in each. With this I expected that I would actually be evading some of the challenges previous researchers have reported with reflecting diverse voices at organisational level where debate over the facts or what is important can be a feature. With my single learning histories, as I

explained in Chapter 4, the challenge would be taking just one or two narratives that in themselves were coherent and engendering a mythic spirit with them. I would not have to arbitrate several narratives. In short I would need to make fewer ‘mythic’ assumptions across a set of varying perspectives. I would pre-empt the inevitable criticism that *‘this was just one or two people’s stories’* by arguing that in spite of this these stories, though unverified, had value in their own right. So by staying close to the data I would stay honest. But I would make no pretence that the data itself was checked for its honesty.

So my stance was that by *‘naming’* the lightness of the single learning history I was avoiding the question of whether or not it was setting me on the road to demagoguery. I was arguing that it didn’t matter. The story still would have the ability to inspire in a meaningful way. It was when I started to test this stance in the field that I had cause to think again.

Early warnings from the field

Once it was written I took the Merton history out to different audiences in the system as soon as I could. I was keen to start working in practice with those aspirations of ‘inspiration and amplification’ I described in Chapter 4. In May 2007 I presented it in a seminar at the Science and Policy Research Unit (SPRU) at the University of Sussex; in October 2007 I presented the story of it to a broader audience of sustainability practitioners at a conference entitled ‘The Next Great Transformation’ at the Eden project in Cornwall; and in December 2007 I narrated a multimedia version of it to MSc students in Responsibility and Business Practice at the University of Bath. What had been devised as a third-person intervention – as I saw it I was putting stories into the system - proved to be invaluable on other levels. The varied audience responses helped me to see the different things people valued or found challenging about the history. For example I started to detect quite early on enjoyment of the Merton story seemed more possible to those who were further away from it. The communicative power of the cat story that inspired distant audiences made others closer to home more sceptical. And it was by working early with Merton in the system that I was able to deepen the questions connected with my starting stance on staying honest. I show two examples below of how these questions started to deepen.

Feedback from SPRU

In May 2006 when I presented my work with Merton to researchers in SPRU they thoughtfully started to probe the researcher's role in research of this kind. One researcher in particular gave me pause to think. He posed a long question using an example from medical research, but in essence he was asking how I managed my instrumental role in this kind of action research:

I responded as follows:

MG: ...There is an element here to the story being presented as a success story and I'm becoming a mouthpiece for that story. Merton is viewed very differently in different places. There is always danger of being co-opted – the only way to deal with it is to be very clear about what one's position is – in other words to be clear that this is one person's perspective and to say I'm treating this agnostically.

Audience Participant: And what happens when you are intervening in the social network and then it becomes perceptively more of a success as a result of your intervention and then you really are in there as a hero yourself....

(we all laugh together)

Transcribed from a recording of my Presentation to SPRU, May 2007

I reflected a lot on this exchange afterwards and gradually my starting stance began to crumble. Though I said I was treating the story of agnostically, in truth I was not. I thought that both the Merton story and Adrian were fantastic. I enjoyed amplifying and celebrating the story in the system. I felt a part of it. And in a way I needed to feel this way to take the story out and inspire others with it. But the SPRU exchange niggled. If I was enjoying Merton and feeling a part of it then surely I was becoming a mouthpiece for the story. In that case I was not agnostic however much I might claim to be. And in that case the possibility that I was promulgating one person's story at the expense of others' was starting to matter. The road to demagoguery could not be ignored – it needed to be considered and a second set of feedback helped me to do this. Coincidentally, as I

described at the end of Chapter 4, the evening of the SPRU presentation I met Thurstan, a sustainability officer from Brighton and Hove local council and agreed with him that he would be an early reader of the learning histories.



Coincidence?

I haven't linked the two before but writing it now I see a coincidence between getting feedback at SPRU and arranging that very evening to have Thurstan be my early reader of the histories. I think this is an example of working quickly and opportunistically to adjust the research strategy in the field (without coming out to reflection).

Feedback from the 1:1 work

Working with Thurstan further challenged my starting stance of just naming and framing the limitations of the histories. The first history I sent him – Merton – had several disclaimers at the front declaring it to be a partial, and incomplete story and that *it was to be read in that spirit*. I soon found however that Thurstan quite naturally read Merton in his *own* spirit! On the marked-up copy he returned to me, the tussles he experienced with elements in the story are plain to see. He already knew all about Merton, his local authority had already had a presentation on it that had not been that well received. In our debrief call he described how he had struggled while reading the history with his preformed views of Merton and of the personalities involved. True, this was one man's story, but he found the tenor of that story irritating in places. He went on to say however that the read had helped him to revise and round out his view of the story and of what had been achieved there. The strength of the personality in it was easier for him to accept in a form where a third party mediates it. Reflections in the text like:

Did the story make the man, or the man make the story?

Merton learning history, page 11

were, he felt, insightful and added distance. He felt that the history overall helped him to be more appreciative of Merton in one way whilst still being annoyed with it in another. This was a theme that would be repeated at the workshops and in workbooks I later gathered and one that will be explored more fully in the next chapter. The histories seemed to help readers into a place of relaxed paradox where opposing feelings could

more happily reside.

This early work I see now as an important validity step of checking the '*mythic assumptions*' of the single history just as Roth and Kleiner urge with the organisationally situated learning history. However here, it was not only my 'mythic assumptions' that were being checked but those of the protagonist. Though others read the history at this time, Thurstan's unique position in relation to the case and his existing knowledge about it, placed him perfectly to push against it. His mark-ups questioned the 'jointly told tale' from both sides. He pointed out several places where, in the text I had 'asserted' something I could not know for sure. And on the story itself he added several comments from his own experience of it. And his willingness to name his feelings in relation to the history yielded a first insight for me into the fact that the history will be read with the reader's frame of reference and not that of the writer's however much she might protesteth or proclaim. I had written a writerly text then, before ever I'd heard of Barthes. And Thurstan's responses helped me to see it as such.



Outliers – institutional insiders play a vital role in assuring quality

Well placed "outliers" (neither insider nor outsider) play an important role in checking the assumptions and quality of the individual history. Outliers will be familiar with the case as it is perceived in the field and the stories that already circulate about it. Their vital perspectives help point out hot buttons and will help curtail a tendency for the researcher to get lost in the story of the history.

What I had not fully appreciated beforehand was the fact that the system into which the history was being offered was itself not uninformed and pristine. It contained actors near and far who each held a perspective on the Merton Rule and how it had come into being. To have validity the 'jointly told tale' that is reflected into that system needs to resonate to some extent with the understandings that already exist there.

Naming and framing the learning history for what it was had been a good stance from which to experiment. By inviting readers to comment on Merton I got useful feedback that helped me adjust my writing style so I could stay closer to the data and so produce a more valid piece of work. But this first cycle also showed me that my instrumental role in propagating the histories needed to be acknowledged rather than denied. I needed to

adjust my starting stance.

Keeping Honest: Adjusted Stance

My adjusted stance was that the learning history needed to have validity as a story and as a representation of an occurrence involving other people. I realised that with an institutionally situated learning history there are actually two stages of validation. The first is a cycling back to those who have been originally interviewed. This can be quite straightforward: it is their story after all. The second stage is more challenging and provocative. It is a cycling back to the field of which the story is a part. This validation step is un-contracted and improvised and rich with ethical dilemmas, as care of the protagonist, the story and other stakeholders must be considered. The way I wanted to address that was by continuing to 'name' and 'frame' the lightness of the histories but to change the nature of the invitation that went with them and to work toward being more inclusive. The next section describes the changing nature of that invitation from what I had been previously offering: 'here is a story, what do you think?', to a new more participative and inclusive invitation of 'here is a story, what is your story?'

Changing the invitation

So my invitation became more pro-active over time. Just 'saying' in the introductory paragraphs that the history was open to comment was not enough without some process to support that claimed openness. As I met further 'outliers' in the field I heard more stories about the histories I was charting. In response I sometimes added a quote into the history to deepen it. But this was still serving the story rather than telling a new story. And the question of those people named in the history continued to gnaw at me. Clinging to the ideas of celebration and participation I started to question how I set about inviting them in more pro-actively. "*What'd it be like?*", I wondered if we ran Merton by the people who are mentioned in it and asked them to comment. This felt important, obvious in one way, but edgy in another. I suggested the idea to Peter over coffee and I remember the thoughtful, quiet pause that followed. In that moment I remember mentally scrolling through the implications of doing something unsolicited and uncontracted at this point: for Adrian, for me, for the participants. Soon after, in a call to Adrian on a Friday

afternoon, I floated the idea by him. As I spoke I heard myself unintentionally reflect back to him his own words about the mood of a late Friday phonecall: *“Look I know it’s Friday, and maybe this is a wacky idea.....but what’d be like if...we sent the histories out to the people mentioned in it and asked to use their names and gather their comment?”* Again a pause as Adrian mulled this over followed by a quiet – *‘that’d be interesting’* or words to that effect. And so it started. I will now narrate an abridged story of gathering perspectives for some of the histories. I will then reflect on the implications of this. This story has been abridged to respect the privacy of some of the correspondence that took place.



Story of a key happening: gathering perspectives, June 2007 to Feb 2008

The idea of gathering perspectives now needed to be actioned and it was immediately a prickly area that I sometimes found myself reluctant to enter. Names and e-mail addresses were gathered from Adrian but I procrastinated on stepping into it all. As it happened I was completing the Nottingham history at about the same time as I was sitting on this idea of getting more perspectives on Merton. I had delayed completion of Nottingham, so that I could flesh out the early history with a second perspective from key innovator Steve Waller. During my sign-off with Steve we discussed the use of names and the need to seek permission particularly from one person who had been significant in the story. This person had come out well in the history and so our request, together with the learning history was merrily sent to him with an expectation of easy consent and, from my side at least, possible delight at the history. Consent was indeed quickly and supportively given; however delight was less forthcoming. The reply was cautious and questioning of how he was represented. This was a surprise to both Steve and I and one we discussed and handled. I cannot give more detail on this, but this first response was to set a pattern that would be repeated and an illustration of the simple human fact that people feel naturally sensitive about being described. And when politics and public life is involved, as they often are, that sensitivity is magnified. The experience with Nottingham had made it all the more important that I should gather perspectives with other histories, but it also made me more cautious. I drafted a letter very carefully, reviewed and revised it with colleagues (see Appendix C) and then, in mid-October 2007, with a deep breath I started to send it out to people close to the Merton history. One immediately replied denouncing the history and wanting no part in it. My stomach lurched as I read his mail. A series of e-mails then unfurled over a period of months. These culminated in a flurry of communication and re-negotiation in Feb 2008 in the final hours before I was to send the Merton history to print in preparation for the learning history workshop.

I cannot share the details of this exchange but can describe my feelings in relation to it. As e-mails with a bundle of feelings, facts and recrimination were shared, I felt I had lurched off-piste with the research. Each time I responded to an e-mail I thought hard and carefully. I needed to learn quickly how to make good decisions. In my journal I wrote some of the principles that seemed to be emerging from that thought and experience. The key realisation was the need to hold a position that was transparent and non-judgemental that somehow stayed true to all the stories however incompatible these might seem to be. To achieve that I needed to be vigilant as to the motivations for my decisions and to box up any views of the personalities I might be inevitably forming through the e-mail exchanges.



Journal entry, Feb 13th, 2007: emerging learnings

When I put the researcher hat on, the views I've formed of the people involved and their way of working fade away. When I'm clinging on to the form of the research and what I'm trying to do it makes decisions much easier. Here are some of the emergent principles and learnings.

1. Check for bias (positive or negative – usually indicated by having a view of the personality in my head)
2. Check am I drawing on pop-images of a person rather than on what they're saying
3. Check am I 'entering in' to things as some kind of judicial magistrate– thinking who's right or who's wrong – this is a sign of using power (and am I enjoying that?)
4. No-one's wrong. Never change the story at the expense of someone else's
5. Check for perspectives motivated from feelings. If feelings are there represent the feelings alongside what they say (e.g. an "appalling misrepresentation" becomes "x felt this aspect of the history didn't do justice to....").

The line I adopted of not changing one story at the expense of the other, of putting feelings in where appropriate, of adding details but not so many as would blur the story held me steady. Like a broken record I repeated it over and again and finally at the end of this exchange there was a moment of capitulation from all involved. The history was agreed.



Journal Entry, Feb 14th, 2008: Catharsis?

In the morning (after the night before) it feels like things have settled. I am feeling wobbly – really tired with all the preparations for the workshop and not sure I can handle another wave. I come in and there is an e-mail from one of the participants who's been quietly watching the storm. I wonder wildly is he now going to retract his history and sigh with trepidation as I open his mail. But he is simply confirming that he agrees to the final copy. And signing off he writes:

I wish we could have met. Judging by your emails, and the story, it sounds like very interesting academic work that also leaves you well-skilled in managing hornets' nests! ☺ In my mind, on reading this, I put my head in my hands and sob. As I don't have time to really sob, I get on and give the kids their breakfast. Over breakfast a few more mails come in from the other participants – each agreeing to the history, sometimes apologising for their reactions or the use of strong terms here and there. The storm is over. Perhaps there has been a catharsis. Who knows? Maybe I'll ask them all about it in the years to come. Andy (my husband) calls from Croyde where he is surfing. I tell him what has happened – 'how are the conditions?' I ask – 'the sea is calm he says but there is some surf'. I feel something important has happened.



Story's end.

The events above erupted in the lead-up to the workshop – an unwelcome distraction at the time from what I saw as the central piece of the research. However the perspective gathering in general, and the Merton eruption in particular was one of the richest events of the research that drew forth – necessarily – some rapid learning on my part. So my experiences in the field helped me to deepen my understanding of what I was doing, refine my practice and it raised some new and interesting questions. Drawing on this story I will reflect on these new questions that were centred on the twin issues of power and responsibility.

Reflecting on Perspective Gathering

Issues of power – practices

I had set out to gather perspectives so as to provide balance to the learning histories and to validate them back in the field from which they came. I hoped this would deepen the histories, make them more inclusive and that overall this would lead to the research being more participative in its approach. However reflecting on the story now I realise that my strategy for being inclusive was not even-handed. The manner of the late invitation naturally privileged the protagonist over the latecomer. The latecomer was invited to tell his or her story in relation to the protagonist's story and not on his or her own terms. There was then what I called a power-frame into which the recipient of my well-meant invitation might be led. This power-frame suggested that researcher and protagonists had a jointly told "history" that was already legitimated to have value and the latecomer was kindly invited, from a more diminished position, to add something to that.

I learnt from the Merton round of perspective gathering to be aware that the late invitation conveys an implicit message of whose story counts on quite a fundamental and emotional level. The practice I developed as a result was to attempt to redress that view by being understanding of hot emotions, making time to hear what was said and refusing to enter into arguments over whose story counts but to try instead to include perspectives. Later, when signing off another history – let's call it history X - I received a strong emotional reaction from a late invitee who was shocked not to have been included in the interviews and asked for the history to be rewritten. When this happened I was no longer as emotionally thrown as I had been with Merton. Now familiar with the reaction I knew I needed to acknowledge the feelings and stay steady. Having explained the nature of the research more broadly and pointed again to the framing section at the front, I went on to say:

However all that being said, I understand your reaction and I'm sorry not to have explained properly the context of what I'm doing. I can imagine that no matter what the doc says about it being a partial account, if you open the document about a project that you have been heavily involved in and see other people featured and not yourself it is a shock and

on some level it might make you feel excluded.

E-mail to a participant

Having named the possible feelings, I went on to invite and include his perspective. The cycle completed very well with his perspective added and the history is now being widely used in his organisation. In this case worries about power, position and importance were successfully re-framed through careful and caring explanation together with a repeated invitation to voice a perspective. This re-framing is the nub of addressing the power issues implicit in the piece. Comments about power and importance are drawn from a frame that learning history is trying to transcend. If the researcher steadily refuses to enter into that frame, participants can, I think, be coaxed out of it and into a safer space where, celebration of diverse perspectives might at last be possible.



Coaxing out of the power frame: a second-person practice

The historian needs to cultivate a second-person practice that coaxes the co-participants out of frames of ownership and power that naturally arise with learning history. This practice involves a steady re-iteration of the story's value, its openness to being enriched/deepened and the repeated invitation for new perspectives.

The researcher's 'steady refusal' to enter into the power frame is, as the Merton story shows, not as clear-cut a practice as it might sound and as the last bit of that story shows it took its toll on me (e.g. "I feel wobbly"). The vigilance I mentioned in the story was not about preventing me stepping into the power frame, but getting me out of it fast enough so I could respond with equity and unencumbered by my own issues. For example when the participant in history X above first responded he wrote:

I don't have time to rewrite it in the time scale you have given below, so suggest that we delay the issue

E-mail from participant in learning history x

I remember my mental response went something like: "Oh no! – I'll have to rewrite" followed swiftly by a teenagery shrugging: "wait a minute....you can't make me!". Not

exactly a mature response. It was from a place where I felt diminished and wanted to fight back. So I was in the power frame myself. When I did respond it was from a very different place where we were all participating on an equal footing, sharing our voices and concerns.



Resisting the Power Frame: A first-person practice for the learning historian

Resisting the power frame is a micro-practice too for the learning historian who needs to be watchful of her emotions and feelings of diminishment which can be a sign she is now unhelpfully in the power frame and would do better if she was out of it.

Two years earlier I had wondered how I might achieve “dispassionate passion” in the research. It was in this phase that it started to dawn on me that this was possible – I could simultaneously hold both passion and dispassion in the same moment. It did not feel duplicitous. It felt ok.



Dispassionate Passion: A lived experience

Holding onto one clear decision-making framework helped guide me even though there were moments I held strong and passionate emotions, reactions and attachments.

This then is a reflection on the practice I developed to support the round of perspective gathering with Merton in order to ‘*keep me honest*’ and to help me and participants away from frames of power that will undermine a process intended to be open, inclusive and participative.

Not all latecomers took the invitation badly or perceived it as a statement of power. Some were very pleased to be asked. But the voices that were added afterwards were muted and shaped by the frame of the narrative that was already set. One participant in Merton had written after his first read: ‘I do not recognise myself fully’. I needed to then reshape the narrative sufficiently so he did. Generally the quality of input from these participating readers differed from that of the protagonists. Later perspectives were added often by e-mail and were more akin to wary reportage than to the stories I had requested. In the Merton history, Joanna Collins’ enumerated description of her role (see p.38) in building the campaign is typical. I reflect now that this is not surprising. My

request for stories *had simply not made sense*. Participants quite simply translated the request into something that did. Their responses were often accompanied with a question '*is this ok?*'. So a 'joining in' did take place, and though many participating readers were pleased to be approached, the way in which it took place was not adequate to draw out the virtual storytelling and celebration for which I'd hoped. So the quality and level of participation was mitigated by the way I conducted the research and the power issues implicit in that. I had learnt that I could not impose the frame in which a history would be read. Nor could I always coax a reader away from an interpretation they chose to make. Practices to avoid live power issues had been learnt, but because the levels of inclusivity varied for participants there were wider issues of responsibility I needed to consider.

Issues of inclusivity and responsibility

My approach to being inclusive raised questions of how I might be responsible to participants. During the Merton perspective gathering I addressed the power issues that arose by improvising and learning as I went along. And in the end it seems to me that something important did happen. The Merton perspective gathering did bring us to a point where painful events were surfaced and I felt safely voiced.

The learning historian tries to do the same thing the mythic dramatist did –
relegate deeply painful events to a form where people can safely undergo
catharsis

(Roth and Kleiner 1998 p.56)

However this might easily *not* have happened and the history might have simply supported a deep-seated pattern of hurt and suppressed voice. I did not deliberately orchestrate catharsis like a mythic dramatist creating safety for people to go to difficult places. Rather I tried to limit damage and retain integrity when painful events started to surface. Had it been a responsible thing to do? Or how might it be made safer?

As a researcher I felt a responsibility both to participants and to the research. But there was a tension in how I was working. On the one hand I wanted to celebrate the learning history stories so that they might inspire others and affirm those who had been involved;

on the other, I wanted to break them down – say there was nothing special about them - offer them out for comment and accept other stories alongside them.

With this institutionally situated learning history, I became aware that just as there are two levels of validation required, there are also two different levels of responsibility. I was responsible to those protagonists who had shared their stories in good faith to treat those stories with respect and care. But I also had a responsibility to those back in the organisation and in the wider field to treat those stories with just enough respect, and no more respect, than anything these other participants might have to tell.

My adjusted stance of being more inclusive seemed to work well at the institutional level. At the learning history workshop participants from across the institutional field were encouraged to voice their often contradictory feelings in response to the histories.



Figure 31 Geoff invites participants to voice their feelings in response to the 'iconic' learning history stories

They were then invited to share their own stories of innovation and these were included alongside the histories as part of the joint learning history. In this way the power of the iconic story was broken down and in a way democratised. And the surfacing and voicing of tensions, struggles and dissent – so important for learning – was occurring just where

it should – at the institutional level. Subsequently I added the comments, questions, stories and reflections of these institutional players to the website. These went alongside the histories and so lent them validity as well as demonstrating the openness of the process. This inclusivity of institutional actors worked well then on multiple levels.

But what then of the protagonist and those involved in the story that is being broken down and equalised? Where were they in this process? Returning to Merton, I e-mailed Adrian shortly after the perspective gathering eruption unsure of what value there had been in this process for him:

I don't know what to say about the feelings this has dredged up. There clearly are power issues over who owns a history - in any family even. But I really have to think, as a researcher, of the validity of gathering perspectives in this way i.e. after the fact. The research is meant to 'have value for participants' - is there value in this I wonder?

E-mail to Adrian, Feb 2008

Adrian did not reply and at the workshop I asked him this question again. He replied with a laugh and words to the effect:

There was no value in it whatsoever! It was a mess!

Adrian, at the learning history workshop, Feb 2008

However of the workshop, where he had witnessed others working with the Merton learning history – and often challenging it - he had said how great it was to see people really engaging with the story:

They're intrigued by it; they want to know more about it.

Adrian, at the learning history workshop, Feb 2008

So though the gathering of perspectives closer to home was seen to have no value for Adrian, the inclusivity at an institutional level was rewarding for him and in a way that spoke exactly to the mood of 'joining-in' and 'celebrating' that I had been seeking to create.

Careful contracting and re-contracting I think, ultimately fulfilled my responsibilities to protagonists as the research unfolded. With Merton, I had needed to step back from my

relational position with Adrian and put my admiration of him to one side when I then needed to contract belatedly with latecoming participants who had originally not contracted with me. To these latecomers I also had responsibilities.

Responsibilities to institutional actors were also fulfilled by inviting them to voice and share their thoughts and emotions and stories. By valuing these voices as much as the iconic stories the research was more inclusive. These participants can still get value from the story irrespective of its closeness to the 'full truth' and were unconcerned if there were limits in its scope or if aspects of it had been omitted.

Responsibilities to those who had a stake in the histories, those who had played some role, were I think only partly fulfilled. For them the history mattered. Not all perspectives were gathered and those that were included were muted in relation to the central history.

Overall learning histories are kept honest by being open and inclusive and there are responsibilities to be considered as to how this is done. Norms will tend to guide participants to translate unfamiliar aspects of the approach into a familiar frame. Acknowledging and working with the different frames in which the learning history might be understood is vital to guide the learning historian to a responsible practice.

Guidance for a Responsible Learning Historian

My reflections of the previous section help me now to articulate some guidance as to how to conduct this kind of learning history research - that is participative and multiply voiced - in a responsible way. Were I to do it again my main recommendation to myself would be to step more clearly into the role of learning historian with the individual histories. Like it or not, by interviewing and then writing a history about a project, I had temporarily elected myself, unasked as the learning historian of that project. How I might don that mantle and later take it off was a question to be considered, and you can see me considering such questions in the earlier Merton story when I found myself mediating between different actors. But the error I had made initially was thinking I might shirk that role altogether on the basis that this was just one story. With Merton, and two other histories, as soon as I started asking for perspectives, I found myself in the role of historian whether I liked it or not. There was barter over the 'facts', there was contention over the 'history' and this was channelled through me. Ultimately reflecting this unspoken role, I found myself invited to events about the Merton Rule and celebrations of Southampton District Energy Scheme. Had I stepped into the learning historian role from the outset, the contracting might have been clearer. I would have felt a clearer responsibility to collaboratively create a storyline and timeline of key events. This would have, at a minimum, been a frame into which participants could feel comfortable to speak their various perspectives. But there is a trade-off. The beauty of the approach I adopted is its light touch and its insistence that the story will and never can be complete. I am torn, even writing this now, between two conclusions. One suggests it would be best to revert to the standard learning history approach of a collaborative and participative pre-planning step to negotiate the timeline and key events. The other conclusion suggests that the attention instead should be diverted to further improving the practice of constantly opening up the history. A meeting to identify and negotiate key events might still suppress voices and support a prevailing single narrative. Whereas a more careful, well-judged and timely practice of opening up the history could put participants on an equal footing whilst at the same time resisting any sense that there is only one story on which we must agree.

For example had I been more watchful of Merton I would have noticed that part of the early history was described second-hand. I then might have invited actors into the story earlier or else confined the span of the history to the events described first hand. Or I might have sketched out the key participants earlier and devised an approach to invite them to contribute to the narrative frame of key events. With my experience now I would be aware at least of the dangers implicit in what I came to call “red-button” phrases (e.g. ‘cobbled together’) that might add to the colour of one person’s story but implicitly detract from the story of another. Some of this practice I started to develop as the research unfolded. In later histories I was more careful with the storyline and in the case of Nottingham and Southampton went back to conduct further interviews to fill out gaps in the history. With Kirklees, my contact approached all the key actors and invited them to participate in the history. When only two replied, I scoped the storyline to fit what I had. Incompleteness was obvious with the history but the invitation had at least been issued. And finally I learnt to be careful with participants. Perspective gathering was re-contracted and carried out in accordance with a feeling for what it was we had agreed. This sometimes required a judgement on my part as to the different purposes it served. With Merton the exercise was understood to be edgy and of mutual interest. Adrian was ‘up for the experiment’. With Barnsley the exercise was more about rounding out the story. I deliberately chose not to pursue multiple perspectives too much in this case. I judged then each case individually as to how far to push the breaking down and equalising of the iconic story.



Guidance for the responsible learning historian

Accept the role of historian and the responsibilities it implies

Collaboratively create a storyline and chronology of key events

Name, invite and include paying attention to the following:

- The history may be read in a spirit different to your intention.
- The timing of the invitation is important.
- Everyone’s story is important.
- Constantly be watchful of the notion that this is not the case.

I have proposed in this chapter that responsibility is not addressed, but rather it is approached by cultivating practices within the role of historian that include watchfulness and judgement. I have reflected on some of the practices that might have led to the cathartic effects of the Merton history occurring in a safer way and I have pointed at some of the judgement calls that working in this way necessitates. I have caught myself almost falling back on wide-netted participation as a salve to responsibility but realised that this alone does not address issues of power; indeed it might play into them. Rather it is the manner and timing of the invitation to participate and the quality of that contract that requires attention so that the learning history reaches its potential for aspirations of celebration, participation and diversity.

Through the Quality Lens

Let me briefly check the quality criteria that were set out in the last chapter. The whole round of perspective gathering was an expression of **quality as watchfulness** over research choices that resulted in an ultimate rejection of the original choice to conduct single, less negotiated histories. The thread of watchfulness goes right through the descriptions above. The passages above describe how **watchfulness** as a practice is developed further on the hoof as feedback started to come in from the field. I became alert to the different kinds of reaction and alert too to my own differing reactions in the face of that. And as a result I became more careful with the writing of the history itself, watchful of hot-button phrases, mindful of emotions.

The invitation for feedback early and often from the field fits well to the description of **'quality as checkpoints and evaluation'** and I think the above shows a willingness to work with that feedback. My **'quality as achieved alignment'** is illustrated by how I worked with and tried to heed feedback that essentially was disconfirming my strategy. So I went back and tried to adjust my four territories of experience trying to get them to line up. At the workshop and with the perspective gathering of learning history X they did seem to line up. But I had learnt how to do this by noticing an initial misalignment. And what of **'quality as postheroic narrative'**? In the passages above I have presented a piece of research that was flawed but that had quality too. In the sensemaking of it I have tried to walk that line between deprecation and triumph – a challenge for me - in

order to reach some sensible guidance as to what might have been done differently to improve my practice. And finally there are many examples of **“quality as brave consequence”**. Consequence was faced with the gathering of perspectives and the use of real names in the research. This was not the easy thing to do. And in some ways it opposes ideas of ethics and identity protection. I have described above how the unexpected impact of what I was doing meant I did not contract properly with early protagonists and overall with the participating readers. So on account of being willing to bravely face the consequences the research did fall short on transparency and what I articulated to parts of the field was at times lacking. This was simply because I didn’t know what was going to happen and a practice I started to develop was the sharing of my vulnerability in relation to that with participants (for example in my e-mail to Adrian questioning the validity of what I had done). On the other hand, driven by the **“nebulous idea of integrity”** I constantly tried to hold on to principles of treating each participant with respect and dignity. And so the consequences of the research – expected and unexpected - were being faced with some integrity albeit sometimes with a wince.

Concluding

In this chapter I have described how some early experiments with the validation of the institutional learning history blossomed into an inquiry into power and responsible practice. The idealistic notion that learning histories would be a site for celebration met with a realism in the field from which came challenge, insight and learning for research of this nature and for my own practice as a researcher. This chapter has described an opening up of the histories for participation. With its emphasis on digging into the implications of doing that, the writing has probably evoked that opening to sound more like the creak of a can-opener on the lid of a rusty can of worms than the clean pop of the cork on a celebratory bottle of champagne. However the clean pop of celebration was also there, as the earlier chapter on the workshop will have highlighted.

The opening up of the histories in turn moved my own thinking on in terms of what working with these histories seemed to imply. I found myself moving further and further away from absolutes:



Journal Entry, Feb 14th, 2008: Yoga musings

During yoga I wonder is it unfair of me to be trying to impose this postmodern view on unsuspecting participants. Over and again I say to them..."trust the reader – he/she will see all those perspectives and draw his own conclusion", "it's ok to be ambiguous": but the participants still react. I reflect that I actually don't believe any more in 'lies' or 'truth' – that what I'm saying to these people is, "there's no such thing as the full truth or a full lie, there's only memories".

And a month later, in April 2008, when I met with a friend James and told him the story of what had happened with gathering perspectives in Merton, he commented:

y'know when you describe that work to me I'm thinking of how useful this would be for diversity training at [the large multi-national where I work].

It's so important to really get people to understand and accept different people's perspectives

1st April 2008 – Late night conversation with James

His comments contributed to my deepening sense that the pluralist aspect of this learning history was as important as the stories themselves. The next chapter will carry on in the direction in which this is pointing by going into a discussion of diversity and postmodernism and the question of just what a learning history is.

8. Questions of Learning History: Wittgenstein's Ladder or Trojan horse?

The last chapter showed, that by opening up the story of Merton and inviting in new perspectives, I started to value the pluralistic dimension of learning history as much as I valued the story it told. I noticed how the value and potential for learning was different for each participant and depended on when and where they engaged with the process. The further this opening process went, the more it contributed to the validity of the original history by layering it with the voices and questions of others – so democratising it – but also taking it further from one agreed rendition of what had happened. The idea of the history conveying a single 'truthful' account was just not compatible with this pluralistic view. Yet Roth and Kleiner write of developing organisational memory through learning history and the singular tense suggests coherence and agreement. So what is the purpose of learning history in terms of charting history? Is it a means of hearing many histories or a way of collectively agreeing one? Overall there was a persistent question that recurred throughout my research: *just what is learning history?* In this chapter I will explore different ways of answering it. First a theoretical backdrop to this discussion will be set out.

Pluralism vs. Unity: Introducing Rhodes

In Summer 2008 I was nearing the end of my field research and I was struggling to articulate what it was I had been doing in terms of 'learning'. I had departed from the creation of a single history to the creation of many and the gathering of stories around them. The histories had been written; perspectives on these had been gathered and the workshop had taken place in which everyone had told their own stories. I was involved in

my final activities – the creation of the website and the small group work with my local council B&NES. Learning did seem to be occurring. All kinds of narratives were being created or retold. And I was involved with several organisations. How did this relate any more to learning history? In a wild moment I typed in *narrative, organisational, and learning* into Google scholar. To my surprise not many relevant looking papers popped up. I felt like I had landed in an in-between place. There was one near the top of the list by an Australian scholar of organisational studies called Carl Rhodes who has written widely on issues related to knowledge, language, culture and learning in organisations. In this paper he was proposing a narrative approach to organisational change and learning based on the gathering and reporting of stories. It was on reading this that I immediately recognised what it was I had been doing. I will set out a brief précis of Rhodes' argument before continuing.

Rhodes argued that there is a paradox between the organisational ideals of learning and diversity. Organisational learning, as popularised by writers like Peter Senge and Argyris & Schon suggest that, like individuals, an organisation is an entity that can be transformed through processes of learning (Argyris and Schon 1976; Senge 2006). The processes for learning draw on action science. Learning occurs when individuals and groups reflect on the relationship between what it is they do (the embodied theory) and what it is they or the organisation says they do (the espoused theory) (Argyris and Schon 1976). Within this set of ideas, Rhodes says, and this is crucial, learning is framed as an occurrence of culture change. The practices of individuals and groups who have learnt permeate to others in the organisation. In this way learning is conceptualised as a unifying process where something overall is 'learnt'.

Rhodes then poses a paradox for organisational learning when he looks at it through the lens of diversity and difference:

How can members of an organisation be considered diverse and individual while at the same time they are encouraged towards socialisation by the manufactured consensus of organisational culture?

(Rhodes 1996 p.2)

By alerting us to the homogenising effects of organisational learning and the paradox it poses for diversity, he points out that indeed any meta-ideal that evokes culture change

suffers the same tension. And this includes the ideal of diversity itself! Rhodes goes on to draw on the work of Aaltio-Marjosola to suggest the only way past this is to abandon meta-cultural ideals:

The postmodern alternative is to abandon “diversity” as a meta-cultural ideal and replace it with research into organisations which take into account their unique multicultural nature and tries to understand the multiplicity of organisational realities (Aaltio-Marjosola 1994)

(Rhodes 1996 p.2)

Rhodes went on to propose a “pluralistic approach to the use of storytelling” was a research approach to learning that would affirm a multiplicity of organisational realities. This rejection of one single reality is in touch with Hazen’s description of an organisation as multi-voiced and polyphonic (Hazen 1993). She writes that when organisations are conceived in this way we:

begin to hear differences and possibilities. We discover that each voice, each person is his or her centre of any organisation. And it is from these dynamic centres that change occurs.

(Hazen 1993 p.16)

When I read Rhodes’ description of narrative learning and Hazen’s term polyphony I recognised it as what I was doing. I could see how I had departed somewhat from the roots of learning history and I had gone further into narrative and into wider participation. Whereas Roth and Kleiner might describe learning history as the development of organisational memory, perhaps even the creation of a new memory, I was working more to create multiple histories and memories and allow them to be tolerant of each other. Rhodes was naming that for me as postmodern.

The postmodern frame brings legitimacy and validity into conflict with each other. Rhodes draws on the influential postmodernist philosopher Lyotard (Lyotard 1984) to suggest that if “truths” are “legitimated” within a discourse then ideals such as organisational learning and diversity are merely communicating a sense of change and progress whilst actually retaining the modernist status quo. So such truths will be invalid. He suggests that:

To research a postmodern organisational learning I am not seeking to develop a consensus about the criteria for legitimisation or to represent the whole, but rather to expose part of the multiplicity of perspectives available in the organisational setting.....To avoid further legitimisation on the part of the “author”, stories are presented as first person narratives with the implicit recognition that this “author” is in possession of only one voice”

(Rhodes 1996 p.5)

So he actively resists overly legitimising stories. This resonates with the conclusions I reached in the last chapter. There I found that the most appropriate practice to redress the inevitable imbalances of power that arise when a story is told, is to be very clear about the limits of its legitimacy and to affirm this by opening the story up for other equally valid perspectives. But the last chapter also highlighted some of the problems implicit in this position of Rhodes. For instance I found that processes of legitimisation are generally outside the control of the researcher. Once told, a story’s legitimacy is in the hands of its reader/listenership.

Though not without its challenges then, this framing helped me place and name what I was doing: it was narrative-based, postmodern organisational/institutional learning. The narrative element strengthened my pursuit of the mythic that in Chapter 4 I described can prove elusive with forms of learning history. And the postmodern element helped me conceptualise learning as an active, participative process of colouring, or texturing the organisational field with stories so as to acknowledge multiple memories and to create multiple possible futures.

This introductory piece illustrates how my experiences led me into a tangle as to what exactly it was I was doing and where the value in this work lay. It also shows how I tried to find a way to make sense of the tangle, to name it in some way.

In the remainder of this chapter, I will broaden out to trace this persistent question as to the nature of the learning history as it recurred through the research. I will describe the various ways I engaged with this question using placebos, horses and ladders.

Placebos, Horses, Ladders

The persistent question: *just what is learning history? Or just what am I doing here?* arose already during the early stages of the research and in this section I show it as it was at those times. In Chapter 4 I describe how in December 2006 I met up with Rupesh Shah. At that time I was writing up the Merton history, still in its single-voiced form, and I was grappling with all the micro-decisions that were arising from the writing and validation of it.



December 1st, 2006: The Persistent Question

A Placebo: would a picture have done just as well?

It was fascinating to speak to Rupesh yesterday – about the mechanics of doing the learning history...[later] A question we talked about was the rigour [by which we meant the structured effort] of the learning history process and we started to wonder about all that rigour. So maybe learning history is like a placebo, or a bridge between old- and new- paradigm thinking: a safe way to bring ‘softer’ thinking into our rationalistic reduced world. We agreed that as much as the people feeding into the learning history have their own perspectives, so too is the manner in which they draw from it. So taking this to its natural conclusion, perhaps if you didn’t do that heavy, rigorous process but if you just showed all the learners a picture, they’d each reach whatever edge or learning they needed to be at. So is learning history merely a meek sheep in elaborate wolves clothing, a device for getting people to pause and have the space to see what they wish to see? So why not use co-operative inquiry instead? On the surface of it the difference is the role of the facilitator. I think there’s a niggly deeper question here though: “does all the rigour and structure of learning history belong really in the new paradigm?” It has this old-paradigm, striving feel to it. To be honest, and yes maybe this is my engineering background, but I think, “yes it does!” Being explicit about the process of coming up with an interpretation frames that interpretation in a particularly gentle way and, the clearer this is done, surely the easier is the route is to learning?

Within that journal entry I can see the start of a set of questions that I carried throughout my research. The shorthand question became: “well would a picture have done just as well?” or in more weary moments “do I really need to be doing all this hard work just to start a conversation?” Or in terms of action research: “just how much does the researcher need to mediate”? I described in Chapter 4 that I was drawn to learning history because it distinguished insider and outsider researchers and played to their

respective strengths. Research that brought the savvy, time-pressured insider and the distant, reflective outsider together as co-researchers would be powerful. Unlike other forms of action research, the researcher had a different voice and brought something into the process. The question was how much to bring in and what purpose did it serve?

Later I started to distinguish much more clearly the “device” – the learning history document - from the “process” of it but I still asked the same kind of question.



March 30th, 2007: The Persistent Question

A Trojan horse with the cunning researcher in its belly?

When I started with the learning history, Rupesh and I had wondered was it a placebo – an apparency where a blank canvas would do. In other words people will learn what they are ready to learn. But the placebo is necessary as it comforts and looks familiar so it is a learning conductor. I then moved on from this ‘placebo’ notion to the notion of ‘Trojan horse’ an analogy I find helpful when thinking about action research in general but I think it particularly applies to the learning history. I likened it to the Trojan horse because of its apparent normality in relation to how business is done – the incumbent regime. The learning history is a document, it has analysis, and it has robust and well-respected words in its title: ‘Learning’ and ‘History’. An organisation could easily be lured into looking at its label and thinking ‘mmm – that sounds nice, I’ll have one of those’. Reified like that, the action research process that goes with it comes in via the back door. Though the Trojan horse is a good analogy its suggestion of stealth makes me uncomfortable. The metaphor implies there will be disconnect between what I say I’m doing and what I actually do. I find myself thinking again about a way of describing learning history that catches the wholeness of the process as well as the object itself...

The Trojan horse metaphor I carried along with me too though I as you can see I didn’t like the manipulation it suggested. And as I reflect now it was, well, a bit wooden and unyielding! Was I really suggesting the learning history document was the horse and then within its belly lay the action research process that went with it? This was setting the ‘thing’ and the ‘process’ too distinctly apart. However what the Trojan horse idea does convey is this notion again of mediation through the familiar. Of using what is familiar in the incumbent regime to engage it and lead it safely, and its own time, to some new understanding that is of value. Some kind of bridging between the two worlds is needed and it was when I tried to put this into words for Geoff, in a supervision

session in mid-2008 that he mentioned Wittgenstein's Ladder. This led me then to my most recent response to the persistent question.

In his *Tractatus Logico-Philosophicus*, the 20th century philosopher Wittgenstein described a quandary that arises when trying to reach what lies beyond the bounds of what can be described in language and logic (Wittgenstein 1921). The realm of nonsense or the senseless is the mystical world of a silent reality: "whereof one cannot speak, thereof one must be silent"²⁵. So that which is described in words is itself limited and not of the world. To resolve the quandary, Wittgenstein offers his ladder metaphor. He proposes that language and logic such as that put forth in his *Tractatus* is like a ladder that can be climbed in order "to see the world rightly". However once the ladder has been climbed it must be seen for the nonsense it is and thrown away. Wittgenstein's ladder is a logical one and assumes that at the top of it the world is seen 'rightly'. This positivist and linear view of how knowledge of the world might be gained is very different to my more action researchy view that conceives knowledge as the result of an iterative process of interwoven experience, presentation, proposition and practice. Yet I felt the metaphor still worked with my broader definition of knowledge and with a less fixed view of the ladder's destination.

The ladder suggests learning to me as a continuous deepening (or rising?) process of moving from the familiar to the unfamiliar. There are, no doubt, many possible ladders. Drawing a picture and facilitating processes of conversation around it as Rupesh and I had discussed might well be one of them. But I think there is something about the learning history in its form - as a document and a process - that creates a robust ladder and that encourages a safe movement from rung to rung. So on hearing me try to answer my persistent question Geoff had reflected back to me a perfect metaphor that caught the elegance of the learning history process that I was trying to articulate. The rest of this chapter develops this metaphor in the light of the theoretical re-situation at the start of the chapter that posed learning history as a postmodern way of working. It takes us onto the ladder and explores learning history as a progression along its rungs.

²⁵ The source for this paragraph's explanation is: Stanford Encyclopaedia of Philosophy: Downloaded from <http://plato.stanford.edu/entries/wittgenstein/> on (21/11/2008)

Learning History: as Wittgenstein's Ladder

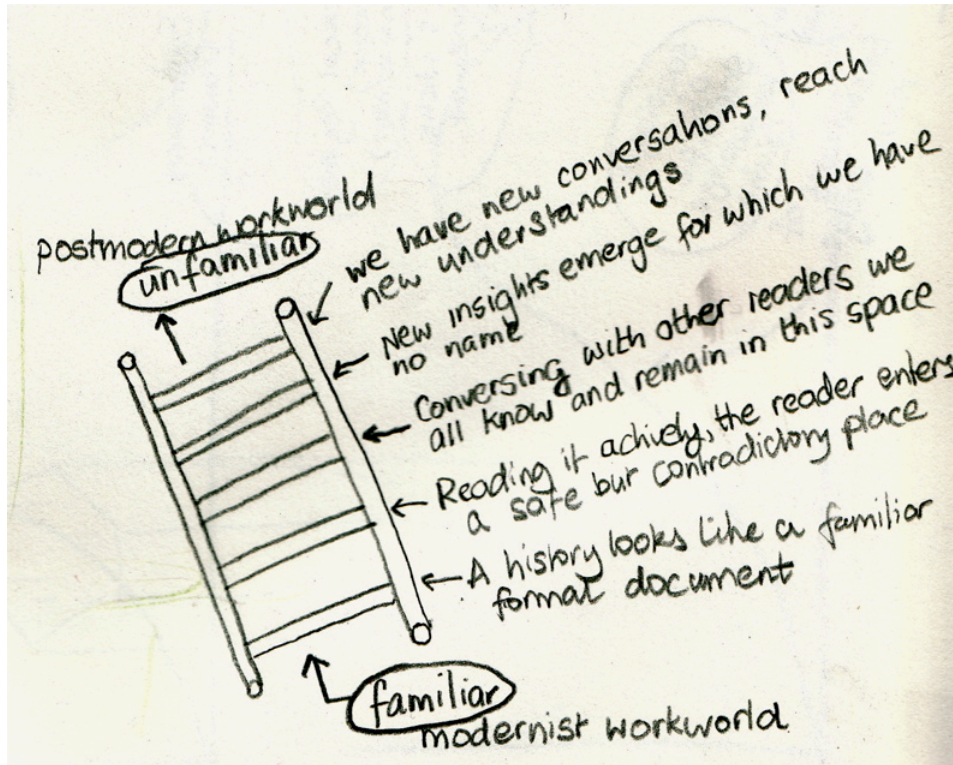


Figure 32 Suggestion of a progression up Wittgenstein's ladder

Starting with the history document itself that is close enough to the familiar modernist ideas on which our workworld is built, a learning history engagement follows a gentle progression into a less familiar, more postmodern space of contradiction and multiplicity. I am suggesting that learning takes place ever more deeply along this progression from the familiar to the unfamiliar. In the figure above I have sketched a possible, top-of-the-head ladder. Now, drawing on examples from across the research I will describe each rung in an attempt to tease out a deeper understanding of the value of this kind of research and how it facilitates learning.

Early rungs: the familiar

My early engagement with participants about the research was straightforward and had an emphasis on the tangibles. I described the research simply and inevitably the description I used in those early days emphasised the output – the “history” - that would

result or was resulting from the research. I had an A4 sheet that covered the highlights of the research (see Appendix D). This offering used familiar language and was received very well. And my short description of action research – as a process that sought to have value for participants - was welcomed with open arms. I thought at first that focussing just on the history ‘object’ might be misleading. However I came to realise over time that the contracting process moved from the transactional to the relational and that what was necessary was a practice of explaining enough at the right time and guiding the process forward to the next stage whilst giving the participant options along the way.

Once histories were written, the process still always started with the familiar and centred on the ‘object’ – the history document. In the flyer for the workshop (see Appendix E) participants were invited to hear about and read some of the five learning histories. The difference to case study was explained but that explanation was familiar too. It wasn’t a case study, but close enough to one to need to be distinguished from it.

Similarly with the small group work at B&NES the histories were also the familiar and interesting means of enticing participants onto the ladder. By the time I contracted with my insider contact there, Jane, and we invited people to the seminars, we were able to offer something familiar and interesting: the histories of five well-known local authority carbon reduction projects.

Next rungs: unfamiliar aesthetic appeal

The idea then of a history sounded familiar enough for participants to get going or to get interested at least in the research. Then there was the history itself. In an earlier story in Chapter 4 I described how, in my first meeting with Thurstan his interest had suddenly picked up when I showed him the Merton history I had written. I will write about choices of form in Chapter 9, but here I want to say that the choice of form as something unfamiliar and engaging was very significant. Once I had written Merton I could show new participants what the output of our work together might look like and the reaction was invariably one of increased anticipation or appreciation along the lines of: “that looks a lot more interesting than the kind of documents we usually write”. For the workshop I agonised over the form of the histories and finally settled on an A5 booklet format that required endless reformatting.

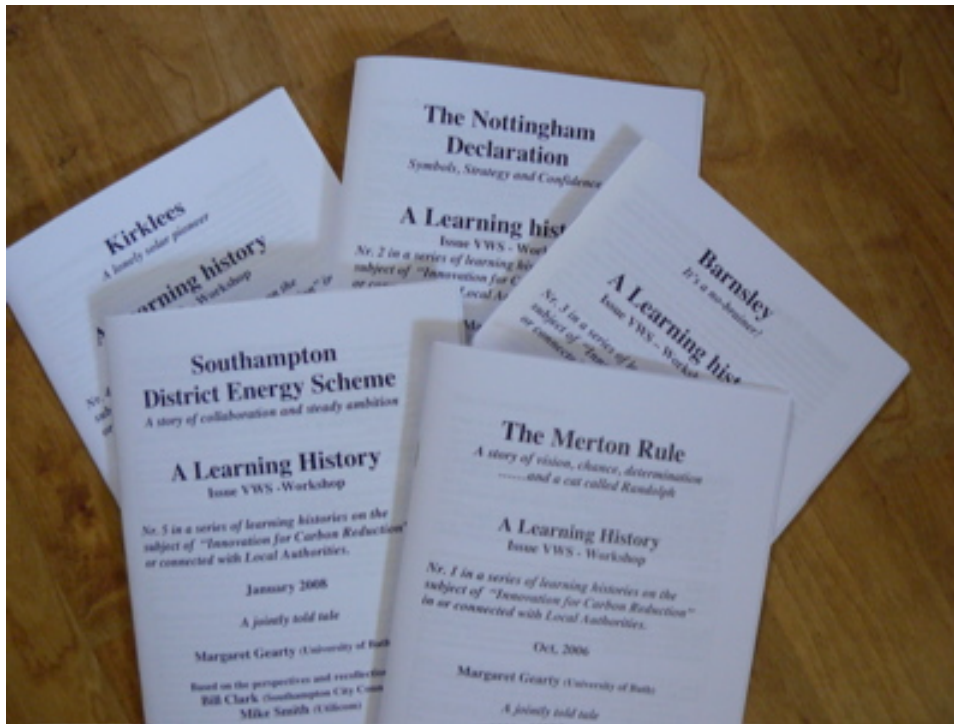


Figure 33 The learning history booklets

But in the end it was worth it. At our workshop briefing meeting my colleagues and I couldn't help ourselves "ooing" over the little colour booklets, flicking through them, touching them. They were aesthetically very pleasing. So it was their very unfamiliarity that this time appealed against the familiarity of what they purported to be.

I will describe later in Chapter 12 how, when I was preparing the final group session for B&NES, I wrote a short learning history of our work together and circulated it. The next week the final workshop was fully attended and I wondered again what role the unfamiliar, but attractive form of this history had played in drawing everyone back into the room.

Aesthetic appeal and readability are important elements to keep the process of learning history alive. I wonder is this the rung that has sometimes been missing from other forms of learning history when researchers like Rupesh and colleagues on the Lowcarbonworks project reported difficulty re-convening participants to read or engage with a written history?

Another rung: relaxed contradiction

This rung has been described in a few places already. In the 1:1 work, when Thurstan read Merton first he described the simultaneous feelings of annoyance and respect it evoked. During perspective gathering I described how I found myself in a place of being able to hold contradictory frames – a dispassion together with a passion – in almost the same moment. And during the workshop when participants heard summaries of the learning history stories they expressed a melee of feelings in relation to these stories as follows:

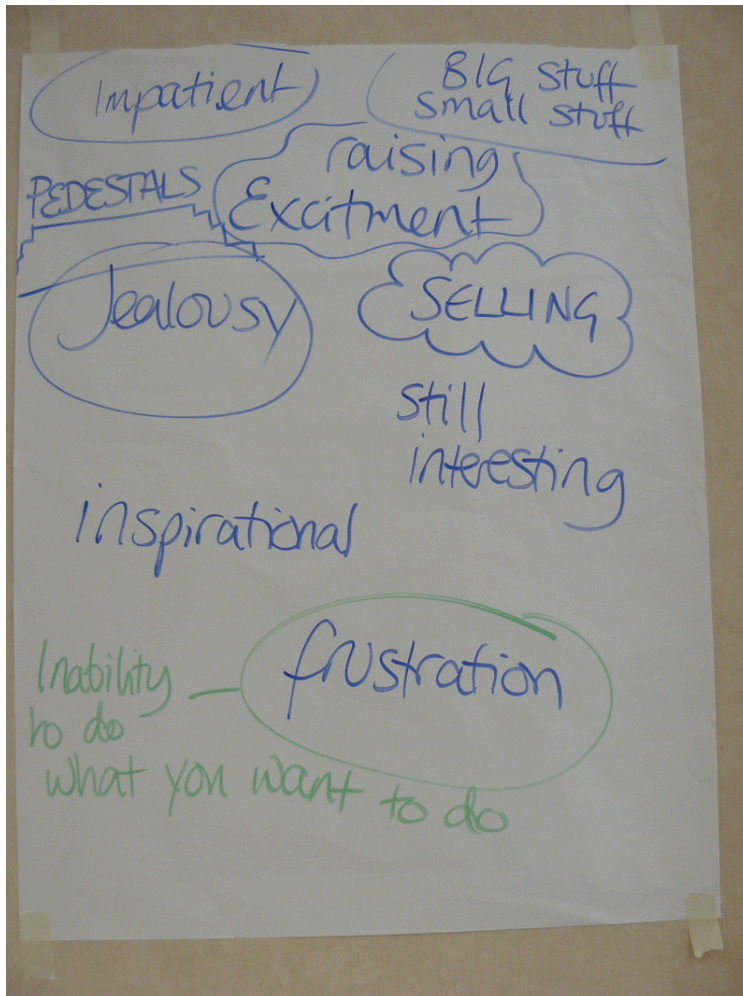


Figure 34 Relaxed contradictory feelings about learning history stories

This melee was reflected in the workbooks that were always filled out by participants (at the workshop and in the small group work) shortly after they completed reading a learning history. The workbooks revealed readers grappling with complex ideas, questions and feelings simultaneously. Sometimes they would comment too on their

experience of being in this space. As one reader of Merton wrote:

Workshop participant: I liked the sense of story direction and drama - I liked reading it, but somehow didn't quite feel satisfied. I suppose because it's a real-life piecemeal messy kind of story.

Commenting on reading Merton (from workbook), Feb 2008

At the workshop, when some 25 people settled down to read the learning histories the atmosphere in the room was intense and different and the sudden experience of this as unfamiliar took my breath away. Whispering to my friend and colleague Paul I said, "goodness, I hadn't anticipated this, it is scary". Paul, whose background is in psychology, countered with the observation that the intensity of the experience was due in part to individuals being helped, psychologically into a different space where contradictions, stories, incompleteness can happily reside. I found the observation very helpful at the time and even more so now as I see the reading as a further experience of the "familiar" (experience of the messy complexities of life) placed within the "unfamiliar" setting (the world of solutions, targets and results). And there was sometimes resistance



Figure 35 Individual reading: entering a familiar space in an unfamiliar way?

to the unfamiliar request to read. At the end of the workshop big read one participant was clearly frustrated with his read and shouted out: "complete rubbish" or words to that

effect. My stomach did its now familiar flip. Later I reflected that this man had come late to the workshop and had missed the framing session the night before. But I wondered too if his frustration had been to do with the unfamiliar request to sit down and read something intently for forty minutes as opposed to getting on with more familiar conference business of presentations and discussions. His harsh reaction was echoed by gentler moments of resistance at B&NES when participants either failed to read or only settled down to it when coaxed. I came to see my request to really read and engage with a long document as inherently counter-cultural in a world of executive summary and skim reading.

So reaching this place of “relaxed contradiction” via the read is challenging. As much as its engaging form might draw some readers comfortably in, its length and unfamiliarity might alienate others. And as the perspective gathering of the last chapter illustrated, a place of contradiction might be reached – but it may be one that is far from relaxed. Some ‘participating readers’ of the last chapter were ushered into a place of shocked contradiction when they opened a “history” about something of which they were part but which was not containing their voices. It seems then that a quality read – by which I mean one that is open, engaged and not skewed by a strong reaction – necessitates some careful facilitation and explanation. Engagement was best when readers had been properly briefed about the research and why they were being asked to read the history.

Rhodes points out that with postmodern organisational learning oppositional accounts should be actively sought because it is this that will allow the “*organisation to see the inherent differences in how organisational members make sense of their organisational experience*” (Rhodes 1996 p.3). With learning history of the type I am describing, I am suggesting that opposition is not an end in itself but an indicator of reaching that important place of contradiction. And I am suggesting that how a participant experiences that place requires some work and care on the part of the facilitating historian. With learning history in this research the key point would seem that the document, with its unusual form and its mythic quality has the potential to open up a space of relaxed contradiction. However realising this potential is an important rung of the ladder. And it is not a self-evident step but one that depends not only on the form and content of the history but also on the way in which it is read.

Next rungs: conversing in this space

The next rung of the ladder brings participants together in a new encounter. Participants enter this space and meet each other with some shared though perhaps highly individual



experience of the previous rung on which they have engaged with a learning history. It is from this shared experience of the unfamiliar that new conversations are sprung and if the space remains relaxed and open to contradiction and multiple perspectives then such conversations might remain polyphonic and somehow be 'new'.



With the perspective gathering of the last chapter new conversations were eventually sprung as the highly individual experiences of the read were slowly brought together until they no longer repelled each other. At the learning history workshop, the space was opened

Figure 36: Conversations in a new space - sharing experiences and responses

more gently by “the big read” and afterwards remained open and

complex. Through graphical facilitation, multiple responses to the histories were invited that could be laid side by side on large colourful pre-prepared posters. Polyphony was further legitimised through group work and story circles where everyone’s story was invited. Similarly in the small group work with B&NES exercises were used to encourage the opening up of a wider and different conversation around the histories.

Outputs can be generated from the conversations in this new space – but they are messy, unresolved and contingent.

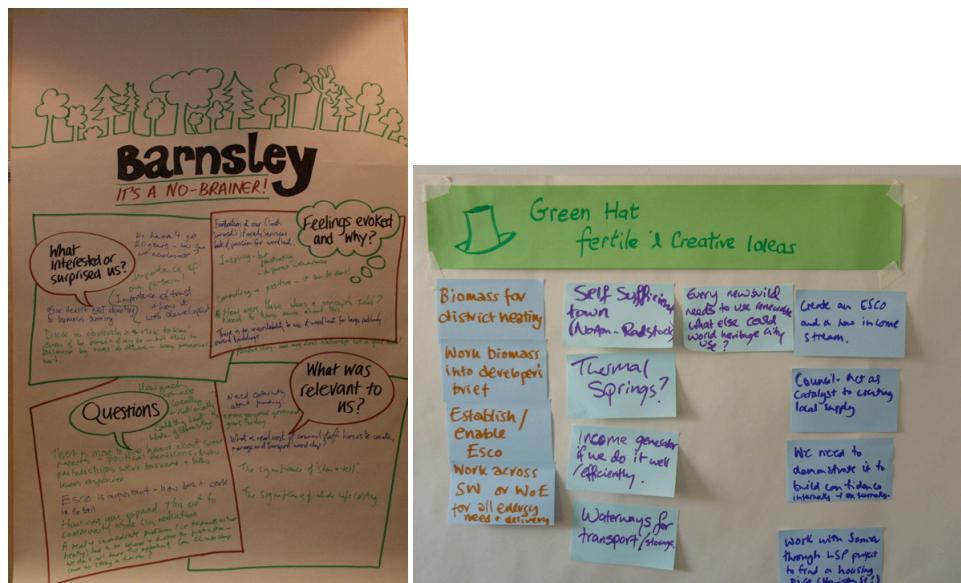


Figure 37 Outputs from conversations on this rung are messy and complex (Workshop outputs (left), and B&NES session 2 output (right))

When collectively a group can reside in this world of relaxed contradiction then to some extent a normalisation of an unfamiliar experience occurs. This may be fleeting, but for a time at least a group occupies a space in which the complex and the contradictory are on the table and can inconclusively but productively be discussed. With the perspective gathering about Merton we almost fell off the ladder but ultimately did reach this space of collective relaxed contradiction. At the workshop and with B&NES, participants were guided through structure more safely into this space. Several workshop participants commented on how helpful it was to share their learning experience with others. At the workshop Thurstan, who had done 1:1 work with the histories, was in a position to contrast the experience of this rung with the earlier rungs. Both were of value he felt, but the collaborative experience seems to have been more deeply rewarding:

Thurstan: Above all else it's given me permission to reflect in an incredibly busy job ...and here [at the workshop] it's reflecting with other people – many of whom have come from the same sort of situation – and that's fantastic! The individual reading is very much noises in your own

head – this [the workshop] is noises in yours and other peoples heads and slightly more purposeful through structure ...²⁶

From recorded voxpops at workshop (Feb 2008)

On this rung of the ladder then is a collective experience of learning that resonates across the literature. From critical participatory action research it is like what Stephen Kemmis has described as the opening of a “*communicative space*” where groups “*encounter each other in a slightly unusual and slightly formal way*” that speaks to the “*inclusive, collective, transformative nature*” of the aims of this kind of action research (Kemmis 2001 p.127). These aims resonate well with the joined-up learning agenda at the heart of this research. From the organisational learning literature come similar suggestions that it is through conversation and collaborative encounter that learning takes place. An extensive survey of the organisational change literature that was commissioned by the government to explore the relevance of that literature to the very context of this research – local government – concluded with some recommendations for knowledge transfer and learning within local government. Noting that organisational learning is a social process the report stressed:

The importance of developing forums for interaction where practitioners can engage with each other and develop learning relationships across traditional organisational boundaries.

(Rashman, Withers et al. 2008 p.102)

Asking what kinds of conversations might create these learning relationships helps to enliven this dry recommendation. In her exploration of innovation in the context of local authorities, MSc student Helen Goulden drew on work of complexity scientist Patricia Shaw and the innovation theorist Jose Fonseca’s work to liken innovation to a vortex that is at once sustained and transformed through conversation and indeed misunderstanding:

Conversations are absorbed into the ‘structure’ continually creating and perpetuating yet transforming the structure.

²⁶ You can hear the full audio clip on the learning history website on http://academicmum.typepad.com/lcw_learning_history_inno/2008/04/thurstan-reflec.html

And so the notion of conversations in a new and different space as a means to learning and transformation is widespread. And it is, in many ways, an action research ideal. It was probably our familiarity with this ideal that led Rupesh and I to talk about such space as 'the goal' of learning history and to then question the long-winded process learning history seemed to be taking to get there. "Would a picture have done as well?" The idea of the ladder responds well to this early questioning. A picture may have done as well but it leaves hanging those questions of how. The way we enter the space is as important as the space itself. How do we enter it? How do we encounter each other in new ways? How do we avoid old conversations masquerading as new? How do we know we are there? The learning history under discussion here is putting the magnifying glass up to these questions of 'how' and suggesting some answers.

Later rungs: new conversations, new understandings

The later rungs of the ladder are where shared understandings are emerging from new conversations for which new language must be found. This then is the point at the top of Wittgenstein's ladder when the previous rungs cease to be as relevant. The learning history itself and the language within it like 'innovation' or 'carbon reduction' are left behind as new understandings are sought that are pertinent to the current set of learners and what they are trying to achieve. At this point the whole subject of the conversation might be called into question. This is like Wittgenstein's observation that what has been used to reach our current understanding is no longer necessary or even sensible. This is essentially a poststructuralist problem where the meanings implied in the signifiers we have been using start to take on new meaning in advance of having words to convey that meaning:

Poststructuralism is difficult to the extent that its practitioners use old words in unfamiliar ways, or coin terms to say what cannot be said otherwise. This new vocabulary still elicits some resistance, but the issue we confront is how far we should let the existing language impose limits on what it is possible to think.

My discussion of this later rung of the ladder is informed by work with the group at B&NES where, unlike other events, there was a sustained and rhythmic cycle of collaborative inquiry. This work will be detailed in Chapter 12. Here the aspect of language at these seminars is used to illustrate the point. Over six months, in a series of seminars and informal meetings the substantive topic of “innovation for carbon reduction” was discussed. However as time proceeded, meta-questions of “what does that actually mean? What are we doing here?” started to surface alongside the main storyline of the seminars.

In seminar 3 one participant commented²⁷:

Participant 1: When you say innovation what do you actually mean by that?

Oct 2008, B&NES session 3

A discussion ensued and we agreed that as a group it was not the narrow technology definition but in this context it was “addressing sustainability by doing something different to how we have normally done things”. So we distinguished ‘innovating’ from ‘inventing’. Innovating might involve new technology, but it might as well include using old technology in a new way or using new business processes, procurement procedures, ways of working, financing and so on. The question reared up again in seminar 4.

Participants: Just what are we talking about here? What is this work we have been doing?

Nov 2008, B&NES session 4

As a group we discussed what we were doing. Describing the seminars as capacity building to increase the organisation’s potential to innovate in appropriate ways to address climate change was helpful; but by now it seemed that innovation was

²⁷ these snippets of dialogue are not verbatim from tape but summarised to carry the thrust of the discussion

becoming an unhelpful word:

Participant: It's all very well in here but to those out there, if I say the word innovation it means something else, it means a shiny new building with this and that technology

MG: So we have reached an understanding in this room about what we are doing here and there is then the separate challenge of trying to explain that to others outside the room....

Nov 2008, B&NES session 4 (from memory)

I went on to comment that innovation is a word that is overlaid with policy implications and the suggestion of technology and invention. But I didn't know if we needed to find a new word or agree a new meaning. The conversation progressed as we became entangled with what it was we might understand by what we were doing and what innovation meant to us.

Here then is a micro-example of Fonseca's description of innovation as occurring through conversation and indeed misunderstanding. By discussing just one word new cultural meanings for the group were being renegotiated in a new space. The hope is that this will in turn influence the organisational landscape by adding a new possibility for how a term is understood. This depth of conversation was only possible because it built on the shared understandings and legitimisation of the space that had occurred over time.

Throughout the last meeting at B&NES it felt as though the familiar culture of the organisation ("we are risk-averse", "we run meetings but they only have value if there is an action plan") was increasingly being put outside the door. This was despite the fact that four directors were present. Inside the space was a new and sometimes unfamiliar culture. For example in a group exercise looking more deeply at how the organisation is with risk, I heard one group-member starting to express the usual received norms about being "risk averse". Intervening I asked – "but in what parts of the organisation is this culture not the case – where are you handling risk well?" The director, to whom I asked the question, stopped short, took off his glasses and rubbed his face vigorously until it

was bright red. He repeated the question slowly as if not comprehending it but thinking about it at the same time. He did not answer, returned his glasses to his nose and the conversation moved on. I can't say what that represented but it struck me as an unusual slowing down thoughtful moment. A pause perhaps within the unfamiliar before moving on.

As we came to the closing round, I asked participants to mention what had surprised them particularly about the seminars. The responses were varied but two participants mentioned the histories themselves as a great source of inspiration and knowledge.

Participant: My point is, rather than surprise, more a pleasure really. Reading these examples [the histories] you think “wow that is a really big jump that they made”, but actually if you look at what we are doing in [our department], we are doing it and I am really pleased to be part of this move[ment], this change and also it's great to have a discussion with the people who want to change

Participant, Nov 2008, Closing round B&NES seminars.

I was surprised and delighted when I heard this comment as it reached right back to the original goals of the research of inspiration, participation and celebration. I was so absorbed by the experience of the meeting as a postmodern, poststructuralist event I had forgotten the importance of the histories in getting us there.

Horse or Ladder?

This chapter has visited the persistent question about learning history that has recurred in different ways throughout the research: what exactly is it and how might it work? The Trojan horse metaphor was found to only go so far descriptively. Wittgenstein's ladder analogy has been proposed as a more generative analogy and one that is truer to the experiences of this research. It describes learning history as a progression from the familiar to the unfamiliar for participants *and* the researcher alike. The outsider coaxes herself and others forward to a place of contradiction and multiplicity from which new knowledge might be created. In so doing, previously held meanings can momentarily

become obsolete.

By diving microscopically into how this progression has occurred for this research, the learning in 'learning history' has been unpacked and shown to have multiple layers: one layer connects to participants' individual learning journeys; another stimulates new shared meanings to be collectively created and new stories to be shared. In all cases learning is occurring within a complex, sometimes contradictory space where there are multiple meanings and diverse voices. For most organisations rooted in modernity this view of learning is counter-cultural. The ladder analogy has suggested how learning history might help to facilitate an uneasy embrace of this postmodern, complex and rich learning space.

The ladder analogy could also help introduce interesting new questions of quality to learning history research. A learning history might be considered afresh in terms of where on the ladder it has been operating. Roth and Kleiner have talked of how important it is that

The document is notstored in a desk drawer, like a report from a consulting group

(Roth and Kleiner 1998 p.58)

But this does happen. As the outsider researcher retreats, a learning history document, like all documents, ends up gathering dust. But the conversations, experiences and insights it has stimulated on its way to that desk drawer are where questions of quality might best be posed.

Drawing on Rhodes, what has been presented here is a postmodern interpretation of learning. Central to this view is polyphony and the use of narrative as a means to embrace the multiple voices in any organisation. The voices in this polyphonic space are authoring their own stories rather than negotiating a singly authorial 'truth'. In this way, as the next chapter will discuss, the sense of the mythic can be well and truly reclaimed.



Writing Now: 5th March 2009

A dream about the ladder

In supervision Peter says he doesn't really like the ladder. He says it's so linear and it's incompatible with the extended epistemology and the iterative nature of action research. I revisit the chapter and think about this a little. He's right of course, but ultimately I brush the critique away a little impatiently. This device is good enough – it makes an interesting point. And I quite like being inclusive of this bad old world of reason and logic that I still feel an affinity to. The ladder could be endless; there could be lots of ladders. I don't think too hard about it. I finish updating the chapter and go off to bed. But then that night (last night) I have a dream. We are in a school/university hall. The children are there, my husband, teachers and Peter. It is some kind of parent's evening. There is a ladder against the wall. And suddenly I have climbed to the top of it and am standing illogically firm on the top rung – my back to the wall and looking down at the room. I feel distant and strange. "I don't know how you can be so balanced there!" a passerby comments. He's right. I start to sway and teeter. I shout out. "Help!" Peter comes over and is at the bottom of the ladder – I want him to catch me but he is too far down. The ladder is falling now so I have to jump and so I do and land with extraordinary and delightful stability back on the ground.

9. Questions of Myth and Form

The last two chapters have traced how I have come to interpret the learning history artefact as an enabling device that supports learning through an iterative and deepening process of participation in which multiple stories are voiced and multiple meanings are shared. With this interpretation the importance of the original history artefact lies as much in its power to compel readers as in its ability to report facts. Indeed, in Chapter 7 I have argued that the importance of a history's veracity connects more to issues of responsibility than it does to learning. The ability of the history to compel relates, I want to suggest, to the mythic dimension. In this chapter I want to explore in more detail this mythic dimension that has been so central to the research.

The Merton history at the start of the dissertation is a good illustration of a learning history with a mythic dimension. Of the five learning histories it charts the most engaging story. I start then by returning to Merton and show how ideas about myth started to surface as I researched it. Linking these to personal experience I will explain my understanding of myth and its importance to me. I will introduce the idea of "mythic deprivation" as representing an absence in organisational life that it is important to address. I will go on to describe how I went about trying to find mythic spirit in the stories I was gathering, or, when this was absent, trying to instil it in the form of the learning history. By the end of the chapter I have reached my Irish roots with a discussion of spirit and mythic abundance. In keeping with its subject matter this chapter has an unfolding and layered form rather than a logical structure.

Surfacing Myths: Woking

When I went to visit Merton I was actually trying to find out about Woking, the iconic local authority that had made groundbreaking strides in reducing carbon through the late 90s and post millennium. The word on the street was that the achievements there were down to the extraordinary capability and determination of one man: Allen Jones. During my interview with Adrian, and this was to be echoed in conversations I had subsequently,

we explored how the myth of Woking and of Allen Jones needed to be created but that it was also disempowering.

Adrian: So in order to promote Woking he [Allen Jones] and Ray²⁸ had to be showmen about it, but that then frightens my chief exec because he says “hang about”, this guy is going ‘Dnnnaaaah!!! I did this, it’s hugely complicated but really absolutely brilliant’”. So my chief exec is looking at this going: “Ah God...I’m not entirely confident that Adrian [can do this], it’s too big – and too clever”. And I’m saying: “Well actually we don’t [] need Allen..I could do this for you”.

MG: You don’t want to reinvent the wheel but you want to drive your own cart.... Maybe the first one has to be like that...but maybe not...It sounds like it’s kind of got locked into it’s own.....

MG&Adrian: Myth!

From the Merton Interview, September 2006 (from transcript)

So here was a myth that created a sense of impossibility and distance. Whenever I asked why Woking had been so difficult to replicate, the people I met had some story as to what it was that made Woking so specific: the geography, the financing, the technical prowess of Allen Jones. On the other hand, as I wrote in Chapter 4, I wanted to keep the narrative spirit in learning history alive in order to create inspiration and a sense of possibility. Did this not sound contradictory? I remember thinking even at that time, while in conversation with Adrian, that it was essential to tell a story that did not distance but that was accessible. But then a mythic quality is surely needed to inspire?



Myth – enabling and disabling

A myth can distance as easily as it can inspire. A story needs to have ‘mythic quality’ to inspire but a realism that does not distance.

²⁸ Ray was the very supportive finance director at Woking who is widely recognised as having played a key part in enabling Allen Jones to get on with the job.

In this chapter I will develop what that ‘mythic quality’ has come to mean. First I will start at the beginning – with the notion of mythic deprivation and its place at the heart of this work.

Mythic Deprivation

I want to start this section with a mythic story of my own. I call it mythic because I have recalled it so many times now that I cannot tell whether its significance lies in the actual moments it describes or in my recollection of them.



Returning to Work, 2002

On the day I returned to my job as engineering manager after my second maternity leave I was struck by how the work environment not only seemed different from my home environment but that this difference represented, on quite a fundamental level, a reduced experience. The previous week whilst at home, the doorbell had rung. It was a spring day and when I opened the door I saw the postman standing in a sudden downpour. Behind him on the lane was his van. It was a vibrant red in the rain and the texture of the stone walls of the lane and the green trees were brought out in relief around it. Now in my office I scanned the open plan, the terminals, the grey carpet, the Gantt charts on the walls and the reports on my desk already piling up. I remembered the bright red post-van and shrivelled inside. I strode into my manager's office and resigned saying: “I can't bear it; it's just too monochromatic here – grey, black and white – it's colourless”. My manager listened kindly, perhaps mouthing “hormones” inwardly to himself, and asked me to wait a while before making any rash decisions. I stayed a full year before finally resigning.

In Chapter 4 I introduced Roth and Kleiner's notion of “Mythic Deprivation” as an idea of importance in this research. To recap they wrote:

Most large organizations are “mythically” deprived. Official documents and presentations are bereft of stories; manager talk in terms of highly rationalized, abstract explanations that do not typically tell how their numbers of policies really evolved...

(Roth and Kleiner 1998 p.55)

Roth and Kleiner propose learning history as a way of addressing mythic deprivation. Its mythic orientation is important they argue because it is through storytelling that the tacit

knowledge of experience can be surfaced. Knowledge management guru Nonaka has suggested that it is through a continuous dialogue between tacit and explicit knowledge that an organisation learns, where tacit knowledge:

Is hard to formalize and therefore difficult to communicate to others ...tacit knowledge is deeply rooted in action and in an individual's commitment to a specific context ...tacit knowledge consists partly of technical skills [and partly] of mental models, beliefs and perspectives so ingrained that we take them for granted and cannot easily articulate them.

(Nonaka 1991 p.98)

Through story then, the learning history approach reconnects back to the mythic quality, as it is instrumental to learning. As the Warwick researchers on learning in local government concluded:

The embedded and contextualized nature of much knowledge requires a consideration of how learning is shared without being de-contextualised and losing significance.

(Rashman, Withers et al. 2008 p.15)

Unlike case studies, the learning history keeps its focus on the human experience and so the knowledge is kept in context. That is a strong and logical argument and one I touched on in Chapter 4 to explain that I wanted to explore how to keep the narrative spirit alive in learning history because I saw this as a means for communicating about “Visionary” change.

Yet when I read the term “mythic deprivation” first it connected not on this rational level, but on the level of my imagination. It immediately evoked my own myth of the red post-van and the monochrome workplace of my opening story. I knew “mythic deprivation”. I had lived it. And in connecting to that personal myth, there was an imperative for the work I was doing that was internally quite visual: it had to do with colouring and texturing a barren field with living stories. Somehow from these stories a mythic mist might exhale across the field. I share this more romantic view because, on reflection, I think it drove my commitment to work with the mythic quality more than any logical imperative.

As the chapter unfolds I will be looking at how the search for this mythic quality has inhabited and informed the research in different ways. I will look at the myths in the histories themselves, the challenges there can be with 'creating' a sense of the mythic in learning history and the relationship between narrative structure and form. Already a problem with language is occurring – do I mean story, narrative, myth or mythic. The next section describes how I have come to distinguish the different terms and by doing that I will start to tease out some of the challenges.

Myth and the mythic

This section offers some crucial clarifications as to how I am using the terms myth, Myth and story. I want to start with what I mean by story. A news story might tell of a royal visit for example and describe whom the queen met, where she went and what she ate. This I call a report. Then there might be another story of the same royal visit that tells how, when the queen sat down to dinner, the farmer who sat next to her broke up his bread and put it in his soup and, after a pause, she did the same thing. This I call a story. Both accounts purport to relate something that actually happened, but whereas the report is concerned with facts the story is concerned with suggesting meaning. Stories might be embellished or exaggerated, their meaning is negotiable, but the sense is that they have happened. They are fleeting. Told a few times perhaps. Enjoyed. Forgotten until they are remembered again.

By 'myth' I mean everyday stories that have in some way sustained. They have been shaped through telling and re-telling and through this process they have started to take on new and deeper meanings as a result and the links to what actually happened become more tenuous. This new meaning can reside simply in the storyteller's own mind – by recalling my story about the red post-van several times over the years it has taken on a broader meaning for me and has become my personal myth. Or the 'myth' can come into being through a story or several stories being told over and again in a system. The queen story above has actually sustained to become a myth. I have heard several versions of it, located in different countries. The achievements of Woking have entered the category too of an everyday myth. I have described how there were several stories circulating about it and some of these had settled into myths. There was the myth of the hero who made it possible, the myth that there had been financial sleight of hand and

other myths besides. These different everyday myths jostle side by side and contradict each other. And most people don't really mind whether they are true or not.

All myths have a mythic quality, as do stories told with a narrative spirit. I use the term 'mythic quality' largely interchangeably with 'narrative spirit' to imply the primacy of the story as a way to evoke experience and inspire meanings for the listener as opposed to a means to communicate fixed truths and information to the listener. The 'mythic quality' is purely to do with the power of the story rather than its message. When it comes to Myth with a capital 'M' this distinction is important. Myth arises from cultural myths.

Cultural myths, on the face of it, are just long-lasting everyday myths, those that have over time, through their sedimentation in a culture's psyche, snipped the remaining thread to what really happened. They retain within them meanings that are important. I distinguish them from everyday myths because they are long-lasting and no longer bear any pretence of reportage and so they are free conductors of cultural meaning. But why have they perpetuated? The French philosopher and literary theorist, Barthes wrote that myths are a way of turning history into nature. The intentions of a historical moment are taken into a fictional place that has an allegorical resonance with the 'truth' of the time.

Myth hides nothing and flaunts nothing: it distorts; myth is neither a lie nor a confession: it is an inflection.

(Barthes 1983)

Founder of archetypal psychology James Hillman describes myth, along with mathematics and music, as one of the three bridges between the visible and the invisible:

The long-lasting and ever-renewing vitality of myths has nothing factual behind it. Nothing but invisibles lie behind all myths' strengths.

(Hillman 1996 p.95)

The invisible is made visible through myth. By helping us escape to an imaginal world cultural myths carry meanings that resonate with the times and so they reclaim a kind of truth. These myths become a way of explaining our culture to ourselves. But Hillman warns that we can become entranced, bedazzled even, by the myths themselves rather than the invisible mystery at which they point:

We forget the old lesson, and mistake the finger that points at the moon for the moon itself.

(Hillman 1996 p.94)

Hillman's psychology is inherently polytheistic in that it looks at the different myths, gods, and creatures that shape our psychology. Yet when the myth becomes the moon we return to a monotheistic view. This is where the hurly-burly of myths flatten into a single Myth that claims its capital M. Myth departs from the diverse, polyphonic field of story that we discussed in the last chapter and can start to look once again like a meta-cultural ideal. So whilst a cultural myth has mythic quality through its suspension of fact, it also can be communicating a 'truth':

The reader lives the myth as a story at once true and unreal.

(Barthes 1983)

And with a Myth the communication of that 'truth' has been taken for 'the truth'. It starts to drive out other myths. Cultural myths might become vehicles of intention and perhaps the longevity of a myth might rely on its purity – in other words its ability to exist and have meaning outside the prevailing ideology of the times that created it. Take for example the ancient Greek myth that tells of Icarus who flew too close to the sun in his wings made of wax despite being told not to by his father. This myth has as much resonance in today's financial crisis as it communicates the timeless quality of self-defeating human ambition. On the other hand consider the German fairy story that tells of Hansel and Gretel set within the time of an adult-centred ideology where children were seen as a burden to their parents. The story of how they are abandoned by their weak-willed father and kidnapped by an evil witch is becoming unspeakable in today's child-centred society. In this society the monstrous things that can happen to children have been de-mythologized by 'real' stories and have thus become a subject most people would rather not discuss.

So stories and myths reflect who we are individually, culturally and historically. The individual stories we tell can be a source of identity and redemption:

All of us construct narratives about ourselves-where we've come from, where we're going. The kinds of stories we tell make an enormous difference in how well we cope with change.

(Ibarra and Lineback 2005 p.65)

My personal myth about the post-van is liberating and creates meaning for me through the use of visual metaphor.

Likewise the myths of a society or organisation will reflect back its culture and this can be a source of meaning or a source of entrapment. When a single Myth with a capital 'M' is at work it may well be perpetuating a pattern of habitual thinking. My former workplace and those of local government are not actually deprived of myth altogether but rather they are entrapped by single Myths. To mention but two: the private sector has its Myth of continual growth; local government has its own Myth of being a slothful incapable bureaucracy. The nature of such Myths is abstract, reflecting the disconnection between the formal work place and our world – the kind of eco-blindness I introduced in Chapter 3. They no longer have a link to human experience. The deprivation to which I refer then is one of everyday myth and story that does link back to human experience and thence our world. It is these everyday myths I wanted to work with.

Roth and Kleiner note that these myths live and move through the informal spaces around an organisation:

People in organizations get their myths the old fashioned way – at the water cooler, in the rest room, over early morning coffee before everyone gets in, in late night “watering holes”, at remote meetings and in the car pool.

(Roth and Kleiner 1998 p.55)

There is a wealth of literature looking at organisational storytelling as a means for engaging with the 'tacit' within organisational life. But the purpose of organisational storytelling, in parallel with Rhodes' concerns about learning as a meta-cultural ideal, is replete with questions of power and ownership. If stories are being managed in some way toward Myth then the stories are not so much vehicles of freedom as they are instruments of control.

Gabriel distinguishes the unmanaged organisation as one that is free of controlling Myth – it is a:

Kind of organizational dreamworld in which desire, anxieties and emotions find expressions in highly irrational constructions. The chief force in this terrain is fantasy and its landmarks include stories, myths, jokes, gossip, nicknames, graffiti and cartoons

(Gabriel 1995 p.477)

This dreamworld cannot be managed he suggests. What learning history is trying to do then is tricky. It is bringing elements of this dreamworld into the managed world whose Myth has long been that the rational is the valid *modus-operandus*. Will not this Myth consume the myths of the dreamworld? Or will the myths of the dreamworld lapse into becoming variants of the disempowering Myth themselves – as happened with Woking? In the last chapter we talked about how the steady progression from the familiar to the unfamiliar helped individuals and small groups to safely bridge between the dreamworld and the rational workworld. There is broadly then a cultural clash between the two worlds that I am describing as a clash between Myth and myths. Whereas Myth with its unassailable heroes and authority can distance, myth with its messy humanity can inspire. So the mythic quality I sought was one that would be vested in a multiplicity of myths rather than in the creation of one. Yet as Chapter 7 described, with the negotiation over the authority of the Merton story, this sometimes was a difficult line to walk. With this, and indeed with the other histories, I needed to take care I was not simply contributing to the creation of a new dominant Myth. In the next section I will look at myths that were present and absent in the learning histories and will look at the ways I worked to retain or create mythic spirit in them.



Distinguishing Myth from myth.

I wanted to work with many myths rather than just one prevailing Myth. Whereas Myth becomes unassailable and has heroes, 'myth' is messy and error prone. It has human protagonists.

Myth at Merton

Merton as the first history presented might seem to question the whole notion of mythic deprivation. Here surely is a tale that has plenty of mythic quality? And this indeed is the case. In fact the story as presented by Adrian and minimally re-crafted by me in the writing follows a dramatic structure.

Merton as drama

The 19th century German dramatist Freytag proposed that plays have a recognisable dramatic structure and his “Pyramid” has come to be used as a familiar way of describing narrative structure (Freytag 1863). Put simply that structure is defined as the movement along three points of a pyramid. The narrative moves from the beginning (the exposition) via a phase of rising action up to the top of the pyramid (the climax). From this midpoint the narrative then moves down through a phase of falling action to reach its end (the denouement). The story of the Merton Rule follows this structure quite well. In the first act, *the exposition*, the characters are introduced and set within a context. With their ideas about a radical new piece of policy, they challenge themselves with an elusive quest. An inciting moment closes this phase when this quest has an early unlikely success: their proposal is unexpectedly given passage to the next stage by a kindly inspector. From there is a *stage of rising action* where secondary conflicts and hurdles are encountered in the form of objections and wary civil servants. This culminates in a *climax* where, in a moment of magical luck involving a chance catfight, an audience with the minister is won and events turn in the favour of the protagonists. There then follows a phase of *falling action* where the tide of events unravels favourably from that climax. The policy goes through though not without tensions and arguments over ownership. The final act, *the denouement*, sees Adrian and his colleagues celebrated and feted as heroes – they are sought after and invited hither and thither. Though the forces of darkness are never far away. The story ends with the policy still in danger. The possibilities for a sequel seem high.

Further than its structure the story itself reveals a mythic intention.

They started to speak at conferences around the country, proselytizing this policy and reassuring other local authorities that they too could do this.

Merton Learning History, Page 16

At these conferences the nuts and bolts of the policy was discussed. And in the corner of the presentation slides, Adrian had a picture of his cat Randolph. At the workshop when readers fed back (as audiences always did) the belief that the policy would have gone through without the cat, Adrian shook his head and said:

At the Feb 2008 Workshop

Adrian: “No cat, No policy”

Figure 38: (opposite) Adrian at the workshop

I reflect on this now that he was determinedly keeping the mythic quality alive in his story. In so doing he was challenging the Myth of how things happen in local government by bringing myths from the dreamworld into the managed world for scrutiny. The thumbnail picture of the cat on his presentations had been a nod at the mythic. The learning history now fully voiced his myth in the formal world.



And not surprisingly that myth was challenged. Responses were often dismissive. One practitioner described it as a “yarn”. Another as “hyperbole”. And of the five learning histories Merton was the most relevant to wider audiences, and yet the most vulnerable to being dismissed as irrelevant by those within local authority. The question of keeping the narrative spirit alive applies not only to creating it in the first place in the writing, but also to the subsequent working with that history. The later learning histories with their more evenly undulating events and gentler turning moments seemed on the whole more palatable in the local authority circles in which I worked. Yet the mythic quality of Merton

had a far greater reach. Like any myth

It was at once true and unreal

(Barthes 1983)

A conversation with the following active reader captures this paradox. The reader, who himself is a civil servant, expressed frustration at how the civil servant was portrayed in the story. So he proclaimed this part of the Merton history as unreal

Reader: Margaret you've no idea what it's like to be a civil servant!

But then he went on to comment on what was true:

Reader: My interest is in health systems –but lots and lots of resonances there for me. You read the textbooks about how policy gets made – it'll never tell you about chance conversations down the vets. That's what fascinated me – a real world insight – ministers listen to all kinds of people that they probably shouldn't listen to ..

Active Reader of Merton's comments (in taped conversation, mid 2007)

Mythic Deprivation everywhere

In interview

Inasmuch as Adrian's story was already drenched in mythic spirit, I was to find this was not the case with the other four histories. When I went on to do my further interviews the conversations were more tempered, discussing what had been done but not offering it as an already constructed narrative. I sprinkled my interviews with questions to bring out anecdote and accounts of experience:

“Did you have any sleepless nights?”

“Could you describe any lucky breaks?”

“Can you think of a real high-point?”

These questions often caused a pause, as the interviewee would perceptibly move into

recollection sometimes unable to find something straightaway. But they would often return later to the questions saying:

“Actually that was something of a low point...I remember....”

“When you mention a lucky break...that really was one...”

But sometimes it felt like I was forcing the narrative onto the account

Researcher: “So would you say that meeting was a key moment....?”

Interviewee: “Yes, I suppose it was”

Or words to that effect. So drawing out anecdote was a more usual experience in interview than just listening to pre-packaged myth as had occurred at Merton. The interview process was interesting. There was an expectation of a ‘research interview’ from participants. It often started quite formally. The challenge for me was to relax proceedings sufficiently so that we might engage on a human level whilst still following a procedure that was framed quite formally. This varied from interview to interview and I did always get some little stories – and sometimes a good yarn. And just as I’d noticed way back when I’d conceived the research, there would be a shift in energy, a pause and a stretch into story. Even if it was only for a moment the flicker of the narrative spirit was there if you looked hard enough. Did this pause represent an entry into the organisational ‘dreamworld’?



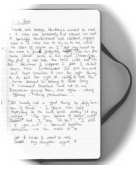
The Pause....

And reminds me too of the moment in the last chapter when the director rubbed his face vigorously....what are these pausing moments? Are they some kind of switch of mode?

In writing

With the four later histories there was much more work to do to create a written narrative from the data I had. For example the contrast between writing Nottingham (the second learning history) and Merton could not have been starker. As I described in Chapter 2 the Nottingham Declaration was a voluntary agreement to act on climate change that had been conceived by a group at Nottingham City Council. Unlike Merton, the action of this history took place mainly (though not entirely) within the formal organisational systems of the council. There were conferences, launch events, executive meetings and ministerial backings all set against a backdrop of varying corporate priorities that

impacted on what occurred. So as I tried to fashion this into a story with mythic spirit from the dreamworld I was struggling. It was at this stage that I really started to think about the tension between report and narrative in learning history and overall what the purpose of the written learning history was. In the last chapter I described in a journal entry how I tossed around these questions wondering was learning history a useful Trojan horse or just a very expensive placebo with which to start a conversation:



March 30th, 2007 (continued)

I am having all these thoughts whilst writing up the Nottingham learning history. I'm finding it a slog to make a story out of what is necessarily quite a dry account. Unlike Merton I feel as writer there is more for me to do here with redressing mythic deprivation. I feel on a mission – but it is a hard mission – to breathe life into what they did there and as I write this I reconfirm to myself that this is important – what I hope to do here is to refresh somehow what they've done. I write about the meaning of the symbol of the Nottingham Declaration and the modern day ritualistic gatherings and hubs that go around it. And as I write about the ambiguity of the Nottingham Declaration as 'symbol' and 'process' I find it mirrors this ambiguity I have about the learning history as 'thing' and 'process'. So unexpectedly for me, the process of writing the learning history of Nottingham had spurred me much further on in my own understanding of my work. So the sentences I'm writing sometimes could be about either.

I need to explain that entry a little. I was struggling to arrive at a rich storyline for the Nottingham Declaration. The Declaration was a symbolic document – just like the learning history – around which events occurred. As I worked with the data I started to realize that the mythic quality was there but I just wasn't seeing it because it was modern-day myth. The Declaration itself was a symbol. The conferences themselves were all pomp and ceremony and ways of gathering around that symbol. The Nottingham declaration was an expression of modern workworld myth and ritual: what I would now call Myth. But the context of climate change, brought to life with a flood just before the launch conference, juxtaposed this Myth with real-world calamity in an interesting way. Just looking at these two pictures through a mythical lens brings home the point made in Chapter 3 about "Eco-blindness". The delight in the unveiling of the declaration "to do something" alongside the inexorably rising waters makes for a chilling or jubilant sight depending on which Myth you have currently in mind. And so I



Figure 39: Myth in symbolic unveilings and real world floods in Nottingham

had my angle. I opened the learning history with the flood as follows:

Introduction

On October 25th, in the Millennium year, just one week before the worst flooding in the UK for over 50 years, a group of some 200 executive and senior leaders in UK local government were invited to gather at a conference in Nottingham in order to discuss climate change

Opener from the Nottingham Learning History

So the mythic spirit was woven into in this written history by bringing the ancient and the modern Myths together. I hadn't made it up. In interview Mike had mentioned the floods and said that the timing of them was curious.

What I notice too in the diary entry is the commitment to the mythic quality. I had to find a story even if at first there didn't really seem to be one. The mythic quality of Merton had sealed an already strong personal commitment. Had Nottingham been the first learning history I wonder would I have persevered to create such a storied account of what I had. I make this observation here, as it seems to suggest that the more common form for learning history -a 2-column form with lighter narrative threading – is no accident. It is more in line with the kind of data one finds in a mythically deprived field. Adhering to the Roth and Kleiner's precept: "stay close to the data" (Roth and Kleiner 1998) then how might the mythic be re-instilled without distortion?



Instilling mythic spirit: an act necessitating due care

Data can, on the face of it, be mythically deprived. Mythic spirit needs to be actively instilled rather than distilled from it. As such, this needs to be done carefully and in a way that still remains true to the original data.

Instilling narrative spirit: tips and trappings

Overall I found that, even with the driest dataset, it was possible to create a sense of narrative in the history and to connect that with the mythic. This was partly achieved through the form of the history itself and by attending to three key considerations as follows.

Tension between narrative unity and multi-vocality

With my interview and additional data I mapped out a timeline of the project. I broke events into a chronology and then chose to hone in on one or two key events. In this way I constructed a narrative framework. Choice of a robust storyline and key events is crucial here. As Chapter 7 explained, there is a responsibility, for ethical reasons, on the learning historian to determine a storyline and a rough chronological framework that is properly scoped and offers a fair representation of the project. Here the storyline and chronology is vital for a second reason namely that the history can have sufficient 'narrative unity' (MacIntyre 1981) whilst remaining at the same time robust enough to incorporate multiple voices along the way. By narrative unity I mean an agreement on key events to anchor the story around which multiple perspectives might then be included. The trade-off between narrative unity and multi-vocality is a demanding challenge for the learning historian. The 2-column format can downplay the narrative voice by distinguishing instead participant voices on one side and researcher reflections on the other. The excerpt overleaf from Rupesh Shah's learning history shows a classic form (Shah 2001). A narrative snippet introduces two columns with researcher reflections in the left column and participant quotes on the right.

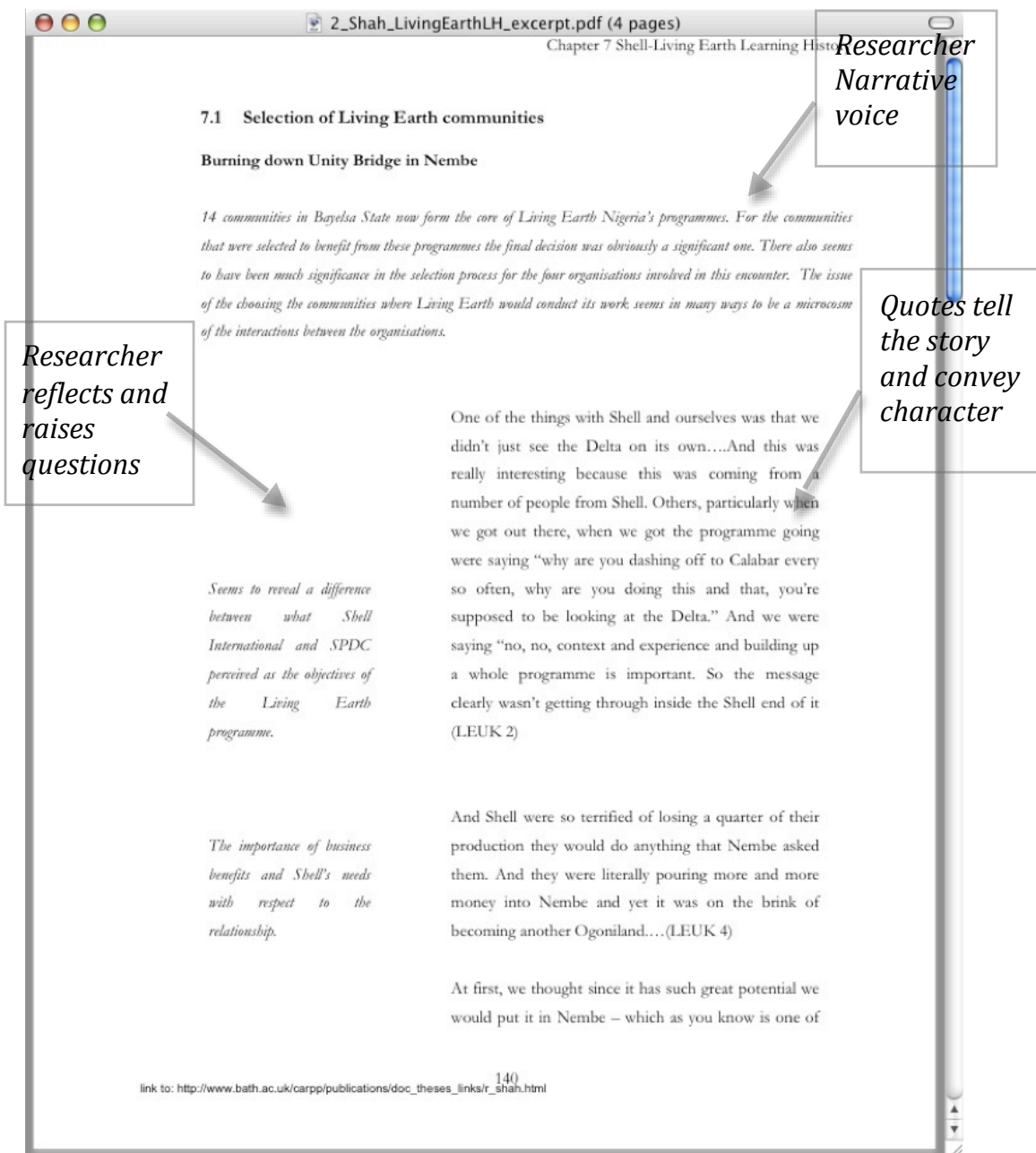


Figure 40 Excerpt from Shah's living earth learning history

With this style some of the narrative is being developed in the quotes. However I found that, as reader, these kinds of quotes did not always draw me in so it was hard to stick with the story. Therefore in my interpretation I have sought to make the narrative voice more prominent in plain text. I then use pictures, quotes and reflections as different perspectives that bring the narrative thread to life. So I distinguish the more reflective and analytical voices of the researcher together with the more characterful voice of the protagonist. The narrative voice that runs through is truly the tale jointly told. I author the

words but what I am telling is close to the transcript. And as time progressed, with for example's Thurstan's feedback during the 1:1 work, I learnt to be disciplined about staying religiously close to the data.

The implication of what I have described is that the mythic impulse of the learning history is, to a degree, at odds with the original 2-column form of presentation. By seeking narrative unity whilst wanting to stay true to the idea of multiple voices, I was led to develop a different form for my written learning history.



Instilling mythic spirit: intertwined with form

Mythic spirit is intertwined with form in learning history: both in the presentation of the document and in the ways of working with it. That spirit can be lost through the two-column form.

On the following page an excerpt from the Southampton learning history illustrates this difference in form:

Excerpt from the Southampton learning history: p.29

Phase 7: The Second Connection - ASDA

When: Late 1988

Where: Southampton

What: ASDA agree to connect

*Chronological
phases identified
and located*

*Joint
Narrative
voice*

The heat station had been built on reclaimed land that was earmarked for redevelopment. It had always been the intention for the scheme to supply those new developments. It remained a challenge to win prospective developers over to that view.

ASDA, a large well-known supermarket chain, was one of the first to put in plans for development near the heat station and with that application the Council had its first opportunity to demonstrate how serious it was about the scheme.

As a new-build, the arguments for ASDA to connect were strong. Not only would they save cost-wise, but extra retail space could be won by not having a boiler room. But, as the partnership were to find in the coming years, strong arguments weren't always enough to win customers.

*Quotes
conveying
challenge*

I wouldn't say it was easy – it is a lot easier with new build than refurb We used the planning; we just encouraged them through the planning system (BC on getting ASDA to connect)



Figure 41: ASDA's connection for heat takes much less space than a boiler room [Photo: Utilicom/SCC]

ASDA did finally agree to connect and this was significant. It was one of the first commercial businesses in the UK to connect to district heating. Furthermore its location on the land near the heat station was significant. It set a precedent for the developments that were to come. For the joint team it probably also marked the beginning of a journey of highs and lows as they sought to entice new customers to connect to the scheme.

*Quotes that
convey the
character*

Is there a celebratory moment when someone says they'll connect? (R)

No well usually it's thank God for that! (BC)

*Reflective voice
points to gaps in
story*

RR

It'd be interesting to hear how this was experienced at ASDA and did they feel or still feel themselves ground-breaking

Life like characters

Crucially a story needs characters and for narrative spirit these characters needed to be brought to life. I took care to introduce protagonists and situate them in scenes throughout the history. Then I chose quotes that would enrich the narrative but that would also convey something of the character and humanity of the protagonist. In this way some of the trappings there can be with using narrative could be avoided. There are the dangers of what David Snowden calls the “Janet and John” effect where protagonists behave in a flat idealized way akin to the characters in primary school reader (Snowden 2001). Equally there is the trap of the heroic victory narrative where one person appears superhuman in the account thus excluding the possibility for any non-hero to do anything similar. This is more difficult to avoid in what is essentially an appreciative account. With the Barnsley learning history for example it was difficult not to think that the protagonist was in fact an extraordinary human being. This then became the mythic fabric of the history where, from within reflections in the history, I drew attention to and engaged with the superhuman powers that were apparent in the story:

Excerpt from the Barnsley learning history: p. 11

Researcher comment: If Barnsley, why not everywhere?



Figure 42 Dick Bradford, Barnsley

other places seem to find it difficult. By the end of the interview after two hours on solid ground, I could empathise with his frustration and at the same time I felt puzzled. If it really was ‘a no-brainer’ then more people surely would be doing it. What was particular about here that made it seem so simple, when clearly it isn’t elsewhere?

The couple of hours I spent speaking to Dick in June 2007 were at once inspiring and puzzling. As he laid out his thinking and approach I found myself relaxing into a place I don’t often find myself in with regard to climate change – a place of certainty. There was a sure-footedness here that was refreshing. Everything as he described it seemed obvious, straightforward, and eminently achievable. He said so himself

several times during the interview, expressing frustration sometimes that

So larger-than and less-than lifelike characters could be brought back to reality by

revealing their natural humanity in the choice of quotes together with the use of the researcher reflective voice in the text. By rehumanising the characters, Myths are avoided. Protagonists can still be appreciated and understood in the context of their personality. The choice of quotes and reflection do gently characterise the protagonists. I sometimes commented openly on their personalities. For example:

Of Merton: I asked, “Did the man make the story or the story make the man”

Of Nottingham: The “Quiet Passion” of the protagonist was listed as a theme

Of Barnsley: The unequivocal nature of the protagonist came across in the “no-brainer quote that was discussed throughout.

Of Southampton: The ‘quiet desperation’ of the protagonist was listed as a theme. These comments were never questioned at sign-off by the protagonist – though the last quote (Southampton) was mentioned by the protagonist who chuckled and said he liked that I’d picked up on that. All the quotes I’ve chosen were however appreciated and chewed-over by active readers who engaged with the characters.



Rehumanised characters

Best practice accounts have no characters. Myths have larger than life heroes and villains. The mythic spirit of learning history introduces characters and re-humanises them with all their glorious human flaws and contradiction.

The deadpan story

A third challenge with narrative is what Snowden has called retrospective coherence (Snowden 2004) where, looked at from the perspective of now, all actions seem to have been mindfully taken in the service of achieving ‘now’. When this happens, chance, luck and serendipity are not acknowledged and everything reverts to the logical view of change as a sequence of well-planned and controllable steps. This challenge is addressed through the structure by explicitly honing in on key moments. So even though in interview at Barnsley, Dick said there was little luck involved and:

Dick: “I can’t give you much drama.”

Nevertheless a narrative still could be constructed from key events, and the reflective questions over the certainty of Dick’s story layered a mythic mist over the entire history. Later when we were to work with this history at B&NES, I titled the session: “Biomass at B&NES: A no-brainer!”. So though this session was focused on the technology, the myth

of the history was right there in the title and informed our conversations.

The narrative spirit then is something that I needed to work at. With the notable exception of Merton, narrative did not fall out naturally in the field in which I was working. But I discovered it could be drawn out through the interview process and then through the writing of the history, and in the crafting of its form. In these ways narratives with mythic spirit could be created that were true to the insiders' experience and yet were crafted and structured in a new and engaging way. However there remained the challenge of keeping the narrative spirit alive beyond that. As I have already described in Chapter 7, readers could not be forced into a certain frame of mind whilst reading. And in this chapter I have already described how the formal workworld might simply not value or understand stories from the 'dreamworld'. So the challenge of connecting with the mythic beyond the writing of the history still remains. Here again the struggles and thoughts I had whilst writing Nottingham proved helpful as the next section describes.

The spirit of the Seanchaí

The earlier diary entry in which I'd started to see parallels between the Nottingham Declaration and the learning history had concluded:



March 30th, 2007 (continued)

And so, not to cut a long story short, the learning history has itself been enlivened of its own mythic deprivation! Now I call it "learning history as gathering point" and I'm starting to see myself as a modern day seanchaí, metaphorically travelling the country dancing between collecting and giving stories and seeing what happens.

The diary entry shows up one of my own myths about the research: namely that the subject matter often informed my interpretation of what I was doing. By thinking hard about the Nottingham declaration and what it actually meant in mythic terms I was able to connect to a more mythically inspired framing about the learning history work itself. The word seanchaí means a bearer of "old lore". A seanchaí was a traditional Irish storyteller who travelled from village to village gathering and telling stories. These stories were not written down, but memorised and passed on in the oral tradition. Bringing the spirit of the seanchaí to the learning history work reached back to its roots in oral history

and connected too with my Irish background.



Figure 43 Chris Seely's graphic workshop agenda included informal and formal time

the two days was used. And in my presentation I showed diary entries to highlight some of the realities of conducting the research together with 'mythic teasers' to invite participants into the learning histories they would later read.

Seanchaí (*Seanchaithe*)

From Wikipedia, the free encyclopaedia²⁹

The traditional art

The *seanchaithe* made use of a range of storytelling conventions, styles of speech and gestures that were peculiar to the Irish folk tradition and characterized them as practitioners of their art. Although tales from literary sources found their way into the repertoires of the *seanchaithe*, a traditional characteristic of their art was the way in which a large corpus of tales was passed from one practitioner to another without ever being written down.

Some *seanchaithe* were itinerants, travelling from one community to another offering their skills in exchange for food and temporary shelter. Others, however, were members of a settled community and might be termed "village storytellers."

As with the seanchaí's traditional art, a set of conventions, styles of speech and even gestures emerged in the form of the written learning histories and - to an extent - in the form of how we worked with them. In the previous chapter I have noted how important the overall form of the learning history was to keeping participants engaged and moving along the ladder from the familiar to the unfamiliar. In this chapter by looking at how I tried to cultivate the mythic quality, some key elements of that form can be identified and these can be summarized as follows:

²⁹²⁹ Downloaded from <http://en.wikipedia.org/wiki/Seanchaí> on 26/11/08



Key elements of mythic form in Learning history

1. Narrative structure in the writing

By choosing robust storylines and then creating acts, scenes and events set on a timeline.

2. Striking a balance between narrative unity and messy multi-vocality

By crafting a narrative from a few, and then subsequently inviting voices in to texture it.

3. Rehumanising characters through quotes and reflections

By introducing characters in context; by offering gentle characterisation; by choosing quotes to reflect personality.

4. Sharing stories in the spirit of the seanchaí

By sharing stories in their mythic form. And by inviting stories and by really listening to them and sharing them on.

To summarise then, I have described how the idea of mythic deprivation caught my imagination and drove a commitment to story that, for good reason, other learning histories do not often share. The quest for the mythic is at odds with the need to stay true to the data. The field will often yield reportage rather than stories with a mythic quality. The historian is therefore not merely surfacing but is to an extent *'creating'* a sense of the mythic and with that faces a set of dilemmas that can partly be addressed through form and presentation. Maintaining a sense of the mythic requires energy too. The spirit of the seanchaí became the imagination of the research and decoupled it from the original, more logical imperative which was more along the lines of: "stories have a place alongside analysis in learning history because they situate experience and therefore aid learning to occur on the readers' terms". What then of the learning history with its bridging appeal to the narrative and the rational modes discussed in Chapter 4? Has it been overtaken by the spirit of the seanchaí? The next part of the thesis will look at the analytical aspect of learning history and will reinstate its value. Here I don't want to enter an argument by comparing the value of the two modes. I want instead to follow the spirit of the seanchaí to its natural conclusion and finish this chapter with a reflection on that.

Mythic abundance: in my mind

I want to follow the spirit of the seanchaí into an imagined place. This is a place where the workworld and dreamworld are re-integrated. Mythic deprivation has been replaced with mythic abundance. Everyone has a story to tell and knows how to tell it. What would that look like?



Imagining a place of mythic abundance....

Organisations, communities and families know their storytellers. These storytellers gather and pass on stories they have heard. They craft into myth some of the stories that they hear told and retold over again. There's a wealth of stories circulating around: anyone can tell their story into the mix. The stories are resilient, light and accessible and are valued far beyond their potential to entertain. They are understood as a way of communicating learning and of sharing our 'indigenous' knowledge (Pettenger 2007). And so there is time to 'really listen' to them. Stories are not owned, though the storytellers do mediate them. Neither does anyone own the characters of the stories (as in celebrity culture) nor do the characters own the stories. The stories are light and changing. As well as stories shared in the oral tradition, new digital media – search engines, video and the internet – facilitate stories to be shared and accessed more easily. But the fast culture that created the new media has slowed down enough to be able to use it.

Is this imagined world where I'm heading with the spirit of the seanchaí a utopia or a tower of Babel? For a utopia surely an entirely different, slower culture is required one that has time to 'really listen' to the stories that are being told. At the end of the learning history workshop I created a website on which I slavishly loaded up all the stories that had been told there. It was the idea of the seanchaí that drove me but I did so with misgivings. Was I not merely adding to the babble in the system for which no one had time? And what of these storytellers – are they not the old powerful priests again: choosing what to 'hear' and 'tell'? How might they not be corrupt?

The imagined place then is somewhere with a different mindset altogether. Occupants have long been coaxed out into the postmodernist frame of the last chapter. Perhaps it lies at the destination of Wittgenstein's ladder. Looking back from there, if we ever do reach such a place of mythic abundance, the learning history might make no sense at all. All that weaving of mythic spirit may no longer be necessary. All those themes and theories explicitly rendered for the analytical thinker may now be trusted to lie in the folds

of the story.



Learning history: A transitional artefact and process

The learning history is probably a transitional artefact and process. If it does what it should then it will ultimately cease to have meaning. It is forever on its way to the shelf to gather dust.

But for now, for this moment of history we stand in a confusing place: western culture is perhaps stuck on the ladder not knowing whether to go back or forward. Rationalism has borne thrilling technological capability, proof surely of human ingenuity and progressive evolution. Yet it has brought with it calamitous environmental destruction, social injustice and, more recently the horrible sense that its structures cannot sustain. It has alienated mysticism, indigenous knowledge, spirituality and myth. In this ambivalent position it probably does make sense to move slowly forward bringing the mythic spirit to the cool, cold lines of our current-day Myths.

Mythic abundance: living it

Just at the point of finishing this chapter, I am fortunate enough to spend two days with storytellers and narrative practitioners from across the UK at an event run by the Centre for Narrative Leadership. The timing could not be more apposite. I am bursting with myth and Myth – the ideas, fresh from the write, are swirling around my head. At the start we are guided to pose our inquiries and this is mine:

If the spirit of the seanchaí was alive today in our modern tribes – be they organisations, communities or families – then what would that look like?

Inquiry question posed after writing this chapter, Dec 2008

And then as the two days unfold, answer after answer is offered. In one workshop I hear for the first time about digital stories. The presenter describes how over several years, communities from all across Wales were invited into workshops so they could relearn together how to tell stories. Then when ready they narrate their own stories on tape and juxtapose them with still images. We watch a few of these stories and I am profoundly moved. The researcher Karen describes how communities gather subsequently to share their stories in church halls. “You can hear a pin drop”, she says and goes on to describe the pride and satisfaction the participants get from voicing their stories. ‘Sharing, celebrating, participating, voicing and really listening’, my mind whirrs ticking off excitedly the hunch that this surely is the mythic spirit, alive and well. In a later workshop, poet William Ayot talks of the role of the ‘bard’ and the importance of ritual. But he is working with it in modern terms. “Today the symbol of our ritual does not have to be a chalice”, he says, “it can be Tupperware”. ‘He’s working myth back into our modern times and in modern terms’, I think. And later he shares poetry from the mythically deprived workworld breathing into it heart, compassion and exposing the raw pain of it. Graphic artist Julian Burton shares images he has made of this workplace: they are unflinching, dark pictures of workers reduced and burdened by targets, outcomes and business speak. To see this theme visualised at last is striking.

And in the evening, as a community, we share stories, songs and poems. An Irish man stands and tells a poem about goodbyes. It starts funny and becomes poignant and I realise it is a goodbye to his father: he talks of holding his weak hand as he is dying and the poem ends with the simple word: Dad? I think of holding my own dying father’s hand

and with a jolt realise it is seven years ago today that he died.

And so it goes on. “This has been a peak experience”, I tell Peter who is also in attendance. In the final session I opt to work with Julian the graphic artist though I know “*I cannot draw*”. He guides me to get the visual idea that’s been in my head for so long now onto paper. And so by the time we are ready to leave, the idea has taken a graphic form. There are two halves. The upper half is our ancient world of the mythic. It is in bright colour. It depicts the west coast of an ancient Ireland near Dingle in County Kerry. The ancient Beehive huts near Dingle represent elegance and endeavour. They hint at copying and learning rather than unique creation. Around the fire people talk and really listen. And out to sea on the Blasket Islands the old Irish seanchaí, Peig Sayers – essential reading for all reluctant Irish scholars – weaves her stories with her pipe in her toothless mouth. “Fadó, Fadó”, she starts. Once long ago.

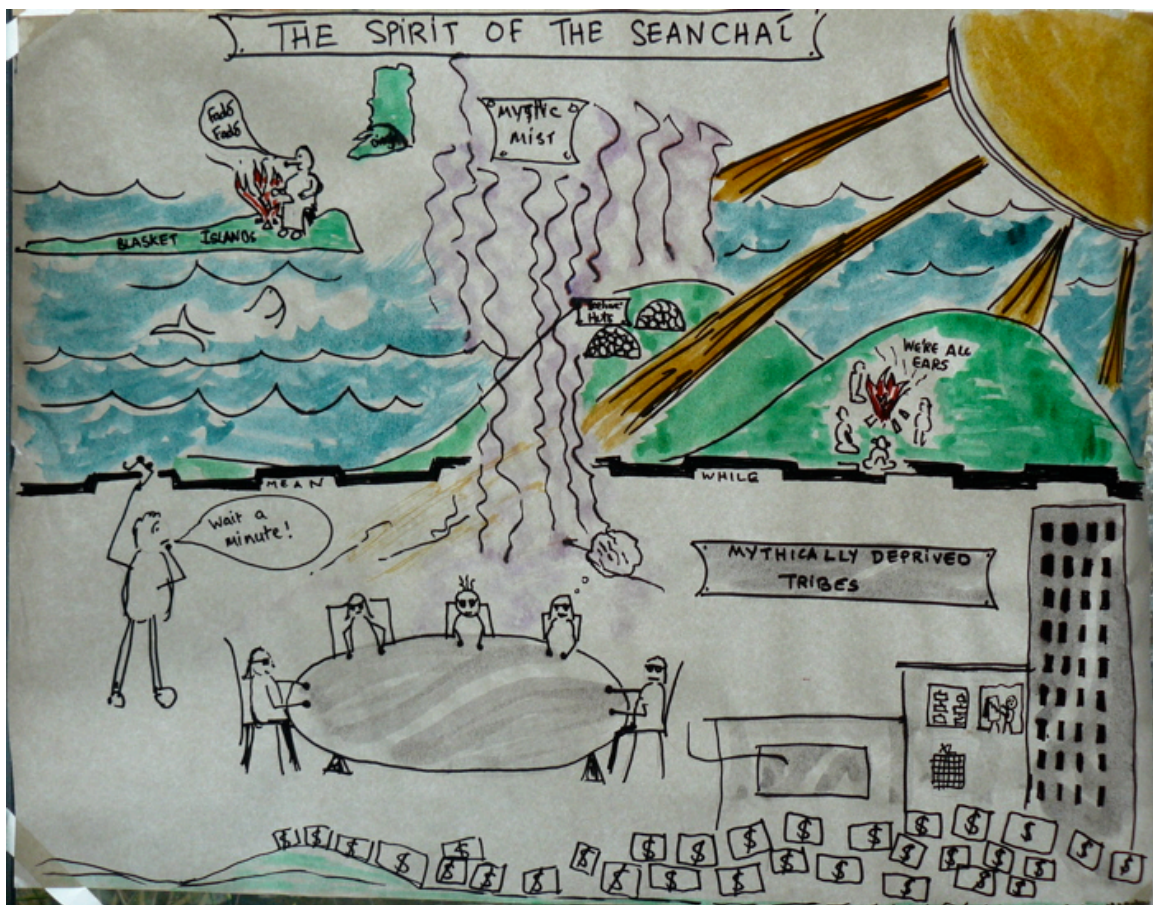


Figure 44 My graphic drawing of mythic deprivation and the spirit of the seanchaí

On the lower half of the drawing is a depiction of a mythically deprived working tribe.

Of course it is in black and white monochrome. It is a relief to draw it at last. Flipcharts, people trapped in spreadsheets and workers wearing dark glasses that shield them from the world they are in. The dollars on which this world sits represents all the different constructs that contribute to the overall blindness to the world and landscape beyond. A glimmer of green lies below but it is not seen. Getting a little biblical then, the mythic mist - or is it a mystic myth - floats down into this world bringing about moments of epiphany.

I present the picture to the community gathered amidst laughter and amusement. I joke about Peig – I hated her stories at school – and with the group we become aware of, and joke about the catholic connotations of the picture as I present. But it is a tender irreverence. Because the spirit of the seanchaí was alive in this modern place. I knew it now. I'd lived it.

Concluding

The last three chapters have delved more deeply into the learning history. Starting with a key event of the research – the process of perspective gathering - the argument and action has unravelled from there as I have reflected more deeply on how the practice of the research relates to aspects of story, form and method. The responsibilities of the learning historian have been explored and the learning history's role in aiding learning and new understanding has been teased out. This chapter has then explored the mythic dimension and I have suggested that this dimension is vital and is closely linked to form. The chapter has concluded on something of a mythic high as I have told of my experiences of the spirit of the seanchaí in action and with that I conclude part two which has been about the field of practice and the place of story in it.

From here I will switch modes into the more analytical and substantive part of the work. The next part of the thesis moves us away from the field and with that into reflection, analysis and theory. By looking at the analytical work, I will explore questions about innovation: both specifically in terms of how innovation for carbon reduction in local authorities comes about and more generally in the context of the 'big issue' of our time.

Part III – Leaving the field
Analysis, Theory and Learning

10. Bridging: From Story to Analysis

Learning history experts describe the need overall for a researcher to move with agility between the three different orientations of the mythic, the pragmatic and the research (Roth and Kleiner 1998; Roth and Bradbury 2008). Roth and Bradbury describe the need to explicitly switch from the “*dispassionate stance and in-depth knowledge of a research oriented behavioural scientist*” who draws out analytical themes from the data, to the engaged and immersed storyteller who crafts the jointly told tale from it, and on finally to the pragmatic “*master teacher...*” who is tasked to communicate in a succinct way the lessons that have been learnt (p.356). Likewise in this dissertation I have been moving between these orientations. The previous section with its detailed field accounts and emphasis on method has been more towards the ‘mythic’ orientation. This chapter marks a shift now to the more analytical ‘research’ orientation that ushers in the final part of this thesis. I am leaving the field now or at least I am in the late stages of inquiry in it. I am reflecting on it and trying to draw out, at a step removed what has been the learning in this research and whom does it serve.

In Chapter 4 I introduced Bruner’s idea that, as humans, we occupy two distinct modes of thought – the ‘narrative’ and the ‘paradigmatic’. Then, and later in Chapter 5, I described that one essential characteristic of a learning history form is that it mixes story and analysis. I raised the question as to how easy or effective it was to mix these two modes. I return now to that earlier question and to look more closely at the role of analysis in learning history.

Analysis in Learning History

Current role of analysis

Analysis relates to the 'research' orientation of learning history that comes to the fore when the researcher is faced with multiple transcripts, field notes and public reports from which she must create a learning history that follows the precept of being 'true to the data' (Roth and Kleiner 1998). Roth and Bradbury describe how, through a process of systematic distillation, meaningful themes can be drawn out. The approach they describe is much like a standard qualitative data analysis and they liken it to a form of grounded theory (Roth and Bradbury 2008 p.355). Grounded theory, as first 'discovered' by Glaser and Strauss in 1967, is theory that is inductively built from the data up as opposed to theory that is being deduced and proven by testing data against theoretical assumptions and hypotheses (Glaser and Strauss 1967). Though there has been some rhetorical wrestling between Glaser and Strauss since then, the basic principle relevant to this discussion still applies: with this kind of analysis themes arise from the data rather than being pre-determined. The researcher is finding rather than looking. So in standard qualitative research terms the results of learning history distillation could be called theory. However in an action research context, building theory in this way is not usually a primary goal. As Roth and Bradbury write:

Because the goal of the learning history is to reflect the insight and learning of the organization and not the testing of theory by researchers, we use the term 'distillation' to signify the efforts of this analytical process to maintain the essence and character of the participants' narrative.

(Roth and Bradbury 2008 p.355)

Analysis in learning history is described then as a means of reaching a valid, grounded and meaningful narrative rather than an end in itself. It supports the mythic orientation by ensuring a rounded story and it supports the pragmatic orientation by coalescing themes into communicable learnings. In their description of the distillation process for a learning history project at the car manufacturing company called AutoCo, Roth and Bradbury describe how the research team generated themes from research data through a

process of analytical brainstorming and clustering. This was done in isolation from the 'insider' participants. The resultant themes were presented back in the document and communicated outwards into the organisation. In this case analysis resided wholly within the research-orientation and was conducted in support of the 'pragmatic' orientation. All three orientations are in the service of creating learning and value for the participants in the learning history process. I agreed with this primary purpose but questioned with my work if there was not an opportunity to open the analysis step up more and so broaden its scope both in terms of adding value to the field and, perhaps more controversially, to the academy.

Analysis in this research

Because it is working across several organisations, there has with this research been more of an opportunity to broaden out the analysis step, to make it more inclusive and to theorise from it. The 'open-system' approach of learning history described in Chapter 4 was defined as occurring at two levels – the individual organisational level and the institutional level. Reflecting this there are also two levels at which analysis occurs.

Analysis in the individual learning histories

Working at the individual history level, the approach to analysis has been similar to the AutoCo example. I went through the transcripts of the interviews and annotated them systematically as I read and listened. I marked up key quotes, added reflections that occurred to me and I identified themes. The excerpt of the Southampton transcript that is shown on the next page illustrates my annotation. Some of these themes I then peppered through the history to support the narrative. All of them I coalesced and summarised in a long table in an appendix to each history. As you will have seen at the end of Merton, I framed these as provisional and discursive rather than authoritative. I offered them for comment. In this way I was exposing the analysis at an early stage and so was inviting the participant into that sensemaking process. Readers often did comment on the tables. The intention with all this was to be appealing simultaneously to the narrative and analytical mode of thought of the reader. As with the presentation of the narrative, the analysis is presented in a 'writerly way' with the purpose of evoking rather than imposing meaning for the active reader.

As I moved through the learning histories I found that the themes I was annotating often linked to themes I had already identified in the previous histories. The excerpt below from the Southampton transcript also illustrates this:

EXCERPT FROM THE ANNOTATED SOUTHAMPTON TRANSCRIPT

Interviewee: At that same stage, this is independent of the work I was doing, we were developing the heat module down at the station. Mike Smith who was then the chief accountant...became director of resources in due course – so right at the top of the organisation – he was central in getting the thermal well dealt with. I wasn't involved in it. *We later moved together. He and I had very similar objectives. I was able to relate to what he was trying to do with the heat agenda and he was able to use what we were trying to do in the planning area to put sustainable heat and energy into the planning context.* This was in the late 80s/early 90s so we were quite far ahead.

THEME: A flowing together of different agendas (just like at Kirklees!)

GENERAL THEME: Converging Agendas & Mutuality enable innovation to occur

Nott'ham	Merton	Barnsley	Kirklees	Southampton
Diverging agendas	Solarcentury	Yorkshire Forestry and Barnsley	Yorkshire Housing and Kirklees Energy Group	Mike+Bill Planning and Sustainable energy. Shared goals. Enabling organisation.
	Green Alliance Mertonothers			

Researcher Reflection: Now isn't that interesting – here's someone again who was good with numbers not too far from the centre of things.

Key quote highlighted

Theme identified

General themes

Reflections

Figure 45 An excerpt from the annotated Southampton transcript

As Southampton was the fifth learning history the theme of converging agendas and mutuality could now be identified across the piece. Similarly there were other recurrent themes that had deepened as I had gone along whilst others had fallen away. The table of themes shown in the appendix of the Southampton learning history illustrates just how many were coalescing across the histories. Together these themes were saying something general about what it takes to innovate to reduce carbon in local authorities. This then was moving my analysis up to the second level – the institutional level - where the opportunity for collaborative analysis and theorizing particularly arises.

Analysis at the institutional level

Because my research has been spread across several organisations, its theoretical

scope is broader than a single-project focussed learning history. Having completed Southampton I then worked across the five learning histories to produce a meta-analysis and this will be presented in the next chapter. Here I want to put that analysis in context. It has not been as completely worked to conclusion as a standard qualitative analysis and this was deliberate. The primary purpose of this research has been to facilitate and amplify learning in the field in which I have been engaged. The analysis is another powerful way to do that. So my strategy has been oriented at getting participation in that analysis so that learning might occur. But a side-effect of this has been that there is a much greater opportunity for collaborative development and validation of the analysis than with a single-project learning history. So rather than working my meta-analysis to the n^{th} degree, I chose to continually expose it and to inquire into it with others from the field.

By the time of the learning history workshop I had coalesced a set of meta-themes that seemed to run across all the learning histories. I presented this incomplete analysis back to the workshop participants as provisional and contingent. I did not emphasise it, but the participants engaged with it and found it interesting. As the digital story of the workshop shows however, the main emphasis was on participants running their *own* analysis of what it is that enables or inhibits innovation for carbon reduction rather than their response to my analysis.



Figure 46 Participants conducting their own analysis at the workshop

I provisionally crosschecked the thirteen themes they identified against my analysis. It was a different analysis, cruder (naturally) but not incompatible. 'Culture and Mindset'

had come out as the most important theme. This supported the bias of my themes that also dwelt primarily on how people work together and what they think rather than on external drivers. But more importantly these workshop themes increased the polyphony of the analysis. The thirteen participative themes were another analytical voice in the research, and one that was equally valid. On the website it was these themes I chose to feature rather than my own.



Figure 47 Participative themes 1 to 5

I continued to open up my analysis in presentations, on the website and in the small group work with B&NES. There we worked directly with my analysis. In session I presented it in a provisional, inquiring way. When the director responsible for ‘Risk & Audit’ nodded and shook his head in grim recognition at the presentation of the meta-theme ‘Risk’ I knew this was a point of validity for the analysis. But I also drew on the rich taped conversation that ensued. It added nuance and identified links that I previously had not made. I updated the analysis accordingly.

Thus, echoing the open-system approach with stories, where the iconic stories were democratized alongside the experience of the participants, the analysis in this research has been opened up and offered back into the system. There it has validated and developed.

This preamble explains how I worked with the ‘research’ orientation to analyse, inquire and collaboratively build theory from the bottom up. The resultant analysis is mindfully

provisional and forever incomplete but it is proposed nonetheless to have value both in its own right as a theory and as a vehicle for further learning and inquiry in the field that generated it. It is presented in the next chapter.

11. Questions about Innovation

What does it take to innovate to reduce carbon in local government? The research started with the observation that across the field of local authority there seemed to be pockets in which groundbreaking, carbon reduction projects had taken place. By using learning history to get inside some of these projects and by then looking across them thematically some general insights can be drawn about the experience of innovation. This chapter presents these insights in the form of six meta-themes which have resulted from a bottom-up analysis that I conducted across the five learning histories. Before presenting this analysis I want to delimit its scope.

The Scope of the Analysis

As the last chapter explained what is proposed here is a partial analysis. The many themes that recurred across the learning histories were aggregated, coalesced *and* boiled down into six key areas that I called meta-themes. So these meta-themes represent the centre of gravity of the analysis rather than the analysis in its entirety.

There is also the overall question of how well the five learning histories themselves represent the field of innovation for carbon reduction in local government. There were other innovative projects in local government beyond those that I featured in the research. Starting out I planned to feature between five and eight projects. What I had not anticipated was the effort involved in each history. The first draft of each took approximately a month to complete. The subsequent sign off and addition of perspectives also took time. As I got into the research, I soon realised that I would be lucky if I managed to complete even five histories, and I set about selecting those five as broadly as possible.

As I described in Chapter 2, I selected examples that were geographically disparate and that featured different technologies and approaches. However the decision to stop at five histories was dictated as much by practicality and time as it was by any sense that my findings had started to saturate.

All these caveats aside, there is nonetheless a robustness to the analysis presented here. Firstly, a form of saturation did occur or at least my view solidified as the analysis went on. As early as the second learning history I noticed how the themes I was annotating overlapped with the previous history. And as I analysed each new history this continued. New themes added nuance or additional insight but generally they were familiar. It had been crucial to get large capital, technology-centric projects as part of the sample, but even these did not change the centre of gravity of the analysis which was honing in on how individuals and groups navigate change rather than on how technologies or vehicles of change are invented.

Secondly, the analysis was also made more robust by working with it in the field. As I explained in the last chapter I validated and developed it with participants. For example, as a result of my work with B&NES, I created 'Knowledge and Translation' as a separate meta-theme and I developed the definition of 'Risk'. So what is presented here is at least the second iteration of the analysis and, as reader you too are invited into this ongoing process.

Presenting the Meta-themes

The way I have titled the meta-themes is somewhat contingent. Each meta-theme relates to the others and these in turn relate to other single themes that were picked out across the histories. For example the meta-theme 'Champions and Coalitions' relates to a theme of 'trust' that recurred across the histories. Either could have been the meta-theme. 'Trust' in turn plays into themes of 'Knowledge' and to 'Risk'. So it is not clear-cut and I have sought a presentation of the themes that does not suggest it is. Each meta-theme will be introduced with a summarising statement. There will then be an exposition of that statement, drawing on various examples from the learning histories, to illustrate it. In places I will bring in some of the conversation from the B&NES small group work around these themes. So it is a conversational, open-ended exposition. At the end of each meta-theme's exposition is a suggested set of learning questions that I have derived from the analysis. What results is a rich, but nonetheless, themed description of what factors seem to be common to these breakthrough projects where low carbon innovation has occurred.

A writerly invitation

The learning questions at the end of each meta-theme are questions that might be asked of any local authority group hoping to innovate in some way to reduce carbon. And there is a possibility they might be applicable to innovative projects in general. Here I want to invite readers into the text to explore just how widely applicable these themes might be.

The primary purpose of the learning questions is to support a cycling back of the analysis into the field for a fresh cycle of inquiry. The analysis is set out in a way that helps ground it in whatever the current context of the participant is. As the previous chapter explained, the intention with this analytical aspect is at one with that of the narrative aspect – namely to allow readers to draw whatever meanings are relevant to their own context and *on their own terms*. As reader then the analysis is being cycled back to you, to your situation and your experience. How well does it resonate? How generally does it apply? I invite you to call to mind an innovative project in which you are involved and to ask of yourself as we go some of the questions that are posed. In this way you can decide how well the current analysis works for you and so you are testing its scope and by inference the value of the analysis in terms of learning rather than in terms of theory. In this way the analysis is forever open and in the field rather than declared, fixed and finished as proposed.

Theme 1: Flexibility with Risk



Summary: approach to risk in breakthrough low carbon projects.

Each learning history involved risks of different types at times, but in each case risk was embraced as part of the project rather than existing outside of it. The individuals and groups involved worked flexibly with risk to bring it to an acceptable level by moving it, sharing it or simply facing into it.

There are all kinds of risks that arise quite naturally from doing something new, some tangible, others less so. Where new technologies are involved, there are very real financial and operational risks. Consider the high costs of the biomass boilers in Barnsley or the cost of digging a well to access geothermal waters in Southampton. Along with these high capital costs are the inevitable risks involved with operating new technologies. When I visited Kirklees, an engineer was on site struggling with a tangle of wires trying to understand a problem with the solar panels. In Southampton you can read of how engineers puzzled for days over the fluctuating levels of water coming through their pump before realising that they were experiencing the tide. Closely connected to these tangible risks is the less tangible risk to reputation that attaches itself to organisations or people who opt to do something different whether it involves high capital or not. Merton carried reputational risk purely in terms of the individual's careers and standing within the local authority. They 'put their heads above the parapet' was a description I heard several times with reference to Merton. What the research showed was that whether tangible or not, risk was subjective – it varied from person to person. And common to Merton and all the histories was an unusual psychological relationship with risk. Whereas 'fear of change' is often a psychological factor that will exaggerate the perceived risks of doing something new, in all the histories, it was the "fear of doing nothing" that drove our individuals into action. Back in the early 90s: Steve Waller in Nottingham could see the environment as an issue that could not be ignored; Dick Bradford in Barnsley could see the increasing dependence on foreign gas pipelines as a senseless risk and Mike Smith in Southampton saw a well being dug in his city by the Dept. of Energy and knew it would be a risk if he did not understand what was going on.

Recognising these different types of risk I could then look across the histories and try to

get an overall picture of how they had been addressed. Placing the different vignettes together I reached the simple observation that each history expressed a combination of risk-reducing strategies together with individual or group psychologies that were willing to face into risk.

Tangible risks were on the one hand systematically reduced by being transferred elsewhere or shared with other stakeholders. By adopting a small, stepwise approach risks were scaled to a digestible size. In the high-cost new technology projects at Barnsley, Southampton and Kirklees, pilots and pathfinder projects were fundamental to reducing the financial and operational risks involved to a manageable size. The following extract from the Barnsley transcript illustrates how Dick selected the first pilot project and how he worked to reduce the various operational and financial risks involved:

So what we did... courageous move two, was to say: “OK we have a particular site that’s in all kinds of trouble anyway, needs a complete refurbishment, needs a new boiler plant etc etc. Why don’t we put a biomass boiler plant in and put a back up gas boiler plant in as well? So that if the market place responds – fine – if the market place can’t respond, we’re not putting people at risk”. That was particularly well received by members because I obtained various grants to pay for both boiler plants. So it didn’t cost the council a bean.

From Barnsley Transcript

Financial risks were often designed out altogether in the early stages. Grants kick-started the Barnsley projects and funded the capital investment they needed. EU funding had underwritten the solar equipment in Kirklees. And in Southampton the second well explorations were funded by EU money.

Operational risks associated with new technologies were addressed by either having extensive and flexible technical knowledge – for example Dick had very broad-ranging technical expertise in Barnsley – or by transferring the risk out to an appropriate organisation that had the requisite knowledge and expertise. This was the case in

Southampton where the energy services company, Utilicom, took on these risks.

If you haven't got the expertise you buy it in you're always looking at risk transfer.

(On partnering Utilicom in Southampton)

Reputational risk was likewise transferred or shared appropriately. In Kirklees, Jimm describes a sinking feeling when he brought the funding stakeholders around the estate:

I remember taking board members around the estate before and the expression on some of their faces of: 'what have we bought into here? Why are we risking our money in this area?' Credit to the directors though: they backed me up in doing the scheme.

(On getting funders involved in Kirklees)

Likewise in Merton, risk was shared with the executive bosses. And by using the due process of existing consultative procedures, an innovative piece of policy could be tried out in a relatively risk free way:

Took it to our bosses and they went: 'well, look hey we've got nothing to lose, we'll put it in'.

(On putting a new policy in the UDP in MERTON)

So strategies to reduce risk were common across the histories. This was however complemented by a second and powerful factor which was a psychological willingness on the part of individuals and groups involved to face into the risks that arose. Risks, and especially those associated with new technologies, cannot be fully predicted. They unfold as the project gets underway and so will always be to an extent, unforeseen. What was striking about all the cases was the tenacity of the protagonists to face into the risks that emerged once the projects got going.

I've been very fortunate in the city council, some of the schemes I've been involved in, huge projects, taken years to do and I've always regarded it as a

challenge. To me it's a bit like doing a crossword or Sudoku puzzle; you persevere till you've got the solution,

(Tenacity and determination, from the Southampton transcripts)

All the projects were characterised by an underlying determination to go forward rather than to fail. What aided this was clarity about what the project was trying to achieve, and a project team who became allied to achieving it. Undoubtedly some of this had to do with momentum:

Like a boulder at the top of the hill; they take a hell of a moving but once they start to be honest you're either on for the ride or you're not

(On the momentum of a project in Kirklees)

But it also linked to the psychology of risk mentioned earlier. In all cases, individuals and groups faced into risk, because failure to act represented the greater risk.

He said: 'I knew they're going to let you do it. It's because they trust you but if you screw up they're going to crucify you!' Well I'm still here'

(On winning trust in Barnsley)



Learning Questions: flexibility with risk

First name the risk:

What kinds of risks are there (financial, operational, reputational etc) for different stakeholders?

How do perceptions of risk vary for the people involved?

How do we see the risk of doing nothing?

How am I around risk? What do I see as risky here?

Then think how it might be addressed:

How might we share the risks?

How might we move or reduce these risks?

Can we face these risks?

Theme 2: Champions and Coalitions



Champions and coalitions in breakthrough low carbon projects.

Each learning history involved champions and coalitions where the relationship between the two is significant and complex. The champion role was flexible and filled at different times by people with invaluable political, social or expert capital. The coalitions were fluid, self-creating and unconfined by organisational boundaries. They were often held together by meaningful human relationships of friendship and respect.

My choice in the titling of this meta-theme is to discuss champions and coalitions in the same breath. Champions are traditionally understood as fixed, long-standing, passionate voices for a cause. Success of a cause, when it occurs, is often attributed to these key people. And this is fair. However this research hints at a more complex picture. It would seem that it is through alchemy between champions and supporting coalitions that these innovative projects occurred. Many of the interviewees in the research would be termed champions. However in their interviews they mentioned various other actors whose importance was crucial at particular times in the lifetime of the project. The champion then became less important than the set of 'championing roles' that were, to an extent, defined by and nourished by supporting coalitions.

Champions played key roles in energising the project at crucial points or over a sustained time. Sometimes they brought different kinds of capital to the project: political or organisational for example. Champions with political capital were common to all five learning histories either momentarily – as in a crucial phonecall in Merton – or over a sustained period of time as in Nottingham, Southampton and Kirklees. Champions with organisational capital played crucial roles directly – using their influence to instigate the projects. This occurred in Nottingham where the original idea for the declaration was executively led. But echoing the point about sharing risk, these champions also played a role indirectly - by supporting and creating the space for the innovation to occur or be sustained.

He [a supportive director] learnt something from me and I certainly gained a great deal from having his support

The importance of high-level support in Nottingham

And he [the Deputy Leader] then took it [climate change] on as a personal crusade to drive it back up the agenda again so he's firmly put it back in the top drawer of things that need to be done

An executive champion changed fortunes in Nottingham

Their support was not always consistent. One interviewee talked about feeling very vulnerable when a powerful champion who had backed him informally failed to back him in public. Similarly in another history there was contention when I gathered perspectives as to how much organisational support there really had been at the start. Nevertheless, lonely though it may have felt, the space that had been conferred spoke for itself. The project succeeded.

Finally there are the champion roles of the **agent provocateurs** who draw in capital and knowledge at the appropriate moment in the project. These champions take the lead to connect and build coalitions to support the work and to keep it alive. This was a role that was often taken by the people I interviewed. I borrow the term from the Nottingham learning history. When it looked likely that the steam behind the Declaration was dwindling Mike called a coalition of interested parties to a meeting in Nottingham:

I think the agent provocateur was Mike....He invited us all to come to Nottingham in the spring of 2005 and said 'look guys'...

From Nottingham Transcript

The coalitions that build around **agent provocateurs** have a quality different to that of a departmental group. In Merton, the cross company coalition that came together in support of it, transcended boundaries and followed '*the common good*' (Merton p.19).

In Southampton, the project team for the scheme was described as special:

It was funny because the way this team came together it's one of the best teams that I've managed. They seem to identify with the project and there seemed to be an energy there, it didn't get adversarial at all, and professionalism sometimes get, you know got put to one side, it was really how can we take this forward, it was really a pleasure to manage.

From Southampton transcript.

These teams have there 'own problem to solve' which sets them apart from project teams. They may still be within an organisation, or to an extent still defined by the organisational structures they straddle as in Southampton and Nottingham, but they are not confined by the organisations they represent. Meetings that felt palpably different were described in Kirklees, Merton and in Southampton. In all cases the different feeling that interviewees described related to how the group transcended defined roles to become issues driven. They were focused on solving or creating something together and had stepped away from their professional roles to do so. Formations such as these give vital life and energy to a project. They sustain confidence in the original vision and help develop it and bring it to a reality.

There is personal relationship and trust within these groupings and coalitions. In Southampton the group described above still keep in touch; in Merton a core group go to the football together, meet in the pub and have even stood as best man at each other's weddings. Again this trust is a sustaining force in the overall project.

So the success of projects relied on champions and coalitions. Whereas champions carry a vision and enable parts of the system to connect to that, the coalitions sustain, nourish and, ultimately deliver the project that represents the vision. This analysis applies to all the histories with one notable exception: Barnsley. Barnsley was much more of a champion's tale. Coalitions that played a part in the project were mentioned but descriptions were fleeting and more in terms of what they did rather than who they were. For instance a group of forestry and public sector people visited Europe on a fact-finding mission. This was a pivotal event in the history, however we have little insight into

how this group sustained afterwards if it did. No doubt then there were coalitions whose absence might in part be attributed to the perspective of the interviewee. But only in part. Across an axis of individual to collective leadership, Barnsley clearly lies closer to the end of individual leadership. When asked if he ever had sleepless nights, Dick replied:

No – I've had sleepless nights in the past but not to do with this. Because all the way through it has been under my control – the things when you get sleepless nights is when it's not under your control. If someone else is going to screw up and drop you in it from an exceedingly great height – but this has always been under my control so I didn't feel exposed.

From Barnsley transcripts

Coalition working is seen here as a source of exposure and loss of control. For this champion, sharing risk with supporting coalitions does not sustain him but magnifies the risk he perceives.

The relationship between coalitions and champions is complex then and varied across the examples. In Nottingham, Kirklees, Southampton and Merton, coalitions interacted with various champions in mutually nourishing and sustaining relationships. In Barnsley the sheer energy and conviction of the champion was perhaps enough to sustain himself. There is no right way. Perhaps the insight is that all these projects found ways of preserving a vision and energising it over a prolonged time. It is rare that an individual can sustain that alone.



Learning Questions: champions and coalitions

Who are our champions?

What kind of capital do they bring?

What is our issue/vision?

Is it sufficiently clear to enable groups to form around it?

What informal groupings sustain our/my vision?

Is there enough energy to sustain our vision?

What groupings/champions might nourish and sustain us?

How might we create links to them?

Theme 3: Knowledge and Translation



Knowledge and translation in breakthrough projects

Domain spanning knowledge was achieved in each project. The requisite expertise to make the project a success was drawn from across different knowledge domains such as technology, finance, policy and so on. The appropriate expertise was brought into the project in acts of translation that occurred either individually or between coalition members whose relational skills were sufficient to bring two or more expert domains together.

Across the histories was the theme of knowledge and expertise from different domains being translated so that it could be appropriately applied to the project at hand. In Merton, though new technology was not directly being used, intimate knowledge of planning policy and procedures was required. The renewable energy expert Eddy underpinned the Merton policy development and was recognised as a vital support to the campaign that was championed by Adrian who had a different set of skills. What brought the two domains together was relationship and trust. Similarly in Southampton the domains of financial and legal knowledge were again expertly brought together in the service of the project. The finance director at Southampton described his lawyer colleague as follows:

[She] was wonderful because she didn't behave traditionally as I find lawyers, having a big complicated agreement, she understood immediately what it was we were trying to do and what the risks were, and she distilled all these down to a very simple agreement, which has actually stood the test of time

From Southampton transcript

With the three technology projects – Southampton, Barnsley and Kirklees, the knowledge domains needed to stretch all the way into the technological world. If the financing and legalities of the scheme needed to be understood in Southampton, so too did the operation of it. Getting a new technological solution to work requires knowledge not only of the technology itself but also of the complex systems of supply and use into which it will fit. These complex systems refer to the supply and use of fuel, heating,

cooling, finance, policy, the environment and transport. The task of transitioning to a new technology is not one of substitution. It might instead be likened to a delicate process of transplant surgery where existing circulatory systems need to be kept going while a whole new system is spliced in.

So the knowledge and expertise in each project was about integrating technology and getting it to run smoothly within certain constraints. And this required resilience and resourcefulness when inevitably it didn't work. So in the Kirklees history one can read of the extra roof platform that needed to be built during the project when they learnt that they needed to tilt the solar panels appropriately (p.24). In Barnsley (p.13) one can read how Dick's journey started with the recognition of an old system where heating pipes were woefully mismatched with customer use patterns. And in Southampton the transcripts described problems with calcification of the pumps that had hitherto been used to pump oil rather than brine (p.21). The result: a new user practice to take the pumps down annually and to clean them out. In all cases the projects did not set out with the requisite expertise but were set up in such a way that they could call it in as required.

This point clearly relates to the previous theme on coalitions. Champions and coalitions straddled knowledge domains and in a way that allowed knowledge to circulate flexibly and be appropriately applied. Consider the inter-disciplinary team in Southampton:

We had a planner, we had a chartered civil engineer, we had an architect, I think we had a quantity surveyor, and then we brought in people as we needed, and we had the lawyer obviously and myself, I chaired it, and then we had people from Utilicom sat on this joint group as well. And then we brought in other officers as we needed them so ... when we were going through the streets we'd bring in somebody from traffic and highways, in fact that guy, he subsequently became a permanent member of the team, the sort of chief, the guy in charge of transport.

From Southampton Transcript

Officers were brought in as needed. By contrast, in Kirklees the project was set up in such a way that an external team managed the renewable energy aspect. This meant

that technical expertise was not brought into the project as flexibly as it might:

We had myself and somebody from the contractor and the architects would go to those meetings but within the project it [renewable energy] was always an outside thing. It could have been brought into the project a bit better than that. So what I'm doing now more is to make sure that it's an essential part of the actual project team. So the whole project development team understands the importance and the issues around the solar panels and things like that.

From Kirklees Transcript

The way knowledge relates to the theme of risk was explored in a session with B&NES. Discussing risk, one participant commented:

It depends on your understanding of risk doesn't it? If you start from a point of no knowledge but there's lots of knowledge out there.... You start from a position of risk with a capital R – and because there's lots of knowledge out there you move to a position of risk with a little 'r' as long as you are aware of the issues. The risks I find more difficult are where you're starting with an understanding that there is a risk but no solution and even when you look in the market place there is no solution....it's understanding what you don't know....

From Southampton Transcript

If wisdom is understanding what you don't know then it seems that the successful projects were wise rather than knowing. With new technology and processes there is, inevitably, a lot of uncertainty. Few people fully understand the technology and their understanding needs to be interpreted and adapted to the problem at hand. The projects featured in the learning histories seemed capable of holding an awareness of what they didn't know together with a sense of what they wanted to achieve. The result was a sense of 'knowing what to do' which was a recurrent theme throughout. 'Knowing what to do' often involved finding something out. It might be something quite factual: for example in this case where the viable woodland around Barnsley needed to be

quantified:

45000 tons is from my PowerPoint presentation because that's figures that have been provided by the forestry people. That is for the 12000 hectares of woodland within South Yorkshire which is not all Barnsley Borough obviously.

From Barnsley transcript

Or where technology is involved, proof of concept is the kind of knowledge that is needed and this can be achieved through a low risk trial, or a small kick-start project. This occurred in Southampton where a small stand-alone heating scheme was trialed at Holyrood. And also in Barnsley where a trial was run to see how existing coal boilers might run with wood pellets:

Yorkshire Forward asked us if we would project manage a trial for all of South Yorkshire to see whether or not wood pellets could be burnt effectively on boilers designed to burn coal.

From Barnsley Transcript

A common view is that groundbreaking projects necessitate an expert to hold the knowledge it requires. A participant at B&NES put this view forward:

Doesn't Barnsley conclude, and certainly it is in my experience, **that the more dispersed it is the more difficult it is to make anything happen.** Because nobody can actually grasp it and the whole thing falls down if one person is doing something else that day or got other priorities....**it's the classic reason why local government never does anything...**"

B&NES participant, Session 3

The above theme is responding to this by saying that sometimes, even with a dispersed project team, knowledge can be held and in these cases local government does manage to do something.



Learning questions: knowledge and translation

What knowledge domains does my project cover?

What are our processes for calling in expertise?

How do we identify what we don't know?

Who in our champion/coalition network holds awareness of what we don't know?

What blocking points do we have that prevent knowledge circulating easily?

Theme 4: Rewards and Recognition



Approach to reward in breakthrough low carbon projects.

Each learning history referred to how the projects were rewarded and recognised. External systems of reward and recognition often kicked in after the project was successful and was not always rewarding in meaningful ways. Success attracted people to the project. Pre-dating this, real rewards for people came from the experience of the project itself. They felt rewarded by its success, the sense of shared endeavour and the opportunity to connect to an agenda that was meaningful to them.

Each of the projects I featured had enjoyed a certain amount of success by the time I came to visit. Merton and Nottingham had become famous in local authorities because the innovations that carried their name had spread throughout the field. Barnsley and Kirklees had won the prestigious Ashden Awards for Sustainable Energy. And the Southampton project was starting to gain a reputation as 'Woking, only better'. And there was a mood of celebrity about too. Kirklees had just had a royal visit from Prince Phillip when I visited in June 2007. And the week before my visit to Southampton they had just had a high-level visit from the mayors of seven US cities who had wanted to see the scheme. Such visits were described to me with a certain amount of surprised pride. As fame attached itself to the projects, organisations that formerly might have been wary moved in to lay claim to the success they had become. As a result a form of post-hoc branding sometimes occurred in ways that sometimes surprised the original participants.

I must admit the whole evolution of this concept of the 'Primrose Hill Solar Village' which is the whole thing together – to me that came quite late in the day.

Kirklees transcript

The interesting thing about the 10% policy is, is, is, y'know, is it would have probably just drifted into history and it is quite intriguing but for the fact that Greater London Authority tried to steal credit for it!

Merton transcript



Figure 48 A royal visit to the Primrose Hill 'Solar Village' in Kirklees in 2007

The projects were attracting less illustrious visitors as well. Researchers at a rate of at least one per week were approaching Southampton and Barnsley. Merton too had been a focus for several policy researchers. And the technology-based projects had become showcases. They all hosted open days and frequent visits from other authorities and groups who had an interest in doing the same thing.

All this recognition occurred after the projects had become successful. And some of it was not rewarding but put an additional burden on the teams, as they needed to now communicate outwards as well as sustain their projects. Some of the councils I visited had become Beacon councils. The Beacon scheme was run by the central government agency for development and learning in local authority, the I&DEA. It awarded Beacon status to the 'best' councils in different areas of service provision and provided funds to them for the showcasing of their practices. The scheme was widely appreciated within local authority circles as a great source of learning. It did however play into a mentality of winners and a grudging tone akin to that describing the 'best boy in class' crept into conversations about Beacon councils.

I went to one down the road [a beacon showcase] – it was good – it was okay! It was just – I guess what slightly puts me off about it is that thing of being put up onto a pedestal and saying 'here's what we do'. Something is a bit eeuuww about it

From Nottingham transcript

In 2008, the system for evaluating the performance of local authorities was overhauled and targets for addressing climate change were finally put in place. At the time of interview however, the lack of corporate incentives to act on climate change was mentioned over and over again as a frustrating impediment. It meant that the featured projects could not explain themselves in terms of corporate performance and, in some cases, for example Nottingham, the absence of a legitimate incentive affected the fortunes of the project. The momentum behind the Declaration had all but died when changing leadership had resulted in a focusing down on core priorities alone.

The direct incentives that are now in place will provide those who want to act with a reason to do so, but these incentives are still situated within an overall culture that rewards success rather than experimentation. As one of the participants at B&NES put it:

We don't have incentives to innovation – in fact we've quite a lot going in the other direction

B&NES Participant, Session 3

In the five learning histories, recognition for what had been achieved was conferred only when success was assured and there is no reason to suggest that the new incentives will change this. A culture of innovation necessitates experimentation and experiments can fail. However, again at B&NES a participant points to a culture that polarises success and failure:

Often people who are given permission to get on with these things – they are driven by a fear of failure not by the prospect of success

B&NES Participant, Session 3

So in the absence of any officially sanctioned incentive to innovate, what drove the individuals and groups featured in the learning histories? Reward seemed to come from a process of connection that might be described as follows: first by connecting to an agenda that was personally meaningful to them (climate change, fuel poverty, community engagement, fuel security...). Second by having or creating a vehicle to carry that agenda forward in the form of a project that was clear about its goals. Third the connection to others on this project yielded positive collaborative relationships. The mutual bonhomie of 'being in the trenches' together was often a sustaining force. Finally

reward came from the sense of achievement when the project was successful *in its own terms*. This often preceded the rhetoric of success and was more to do with tangible and unequivocal project milestones being reached. In Kirklees, Jimm's reward comes from a personal sense of achievement when his project was complete:

And I guess another high point just really finishing the scheme and seeing it completed. Coming back here afterwards and you see kids playing in the little playground and some of the chaps on the site they come and talk to you and tell you what's going on – its great there's nothing like that actually.

From Kirklees Transcript

And overall this echoes across the histories. The incentive common to all projects was not externally given; rather it was defined by the 'health' of the project itself. This health was, in all cases, tangible and quantifiable. The Merton map shows its adoption rate; Nottingham tracked the number of signatures and celebrated the 100th and 200th signatory. Barnsley's tumbling carbon emissions were tracked against internal targets that were years ahead of government targets on carbon reduction. And in Southampton the scheme's health related to megawatts supplied and the number of connections won:

Those [meetings] were really intense....they were looking at getting new connections ... Utilicom were reporting back on the successes, and sometimes we played quite a legal part in getting people linked in as well. And that was really satisfying [getting big customers] Yes always, and that's still the case now. I get a real buzz when we've got new [customers], and we're getting people, a lot more people

From Southampton transcript

It seems then that the external processes for encouraging and rewarding innovation for carbon reduction are somewhat out of step with the internal motivators that drive innovative projects forward. And indeed the current systems that reward and award successful individuals and sub-groups plays into a culture of individualised success that runs counter to the need to stimulate experimentation and to encourage complex networks of action that cross formal and organisational boundaries.

How then might mechanisms for reward and recognition be got more in step with the 'health' and 'spread' of an innovation? This question has implications at the institutional and policy level. It suggests that the creation of projects that generate their own incentives is of paramount importance. These projects need to connect in a tangible way to agendas that have meaning for those involved. Where a project is rewarded by its own 'health' then the spread of its ideas will more naturally occur. When the 'health' of a project can be understood as something tangible then the felt sense of achievement is greater and more people are drawn to be involved in the project. So this creates a virtuous cycle. It suggests too that the current systems of recognition need to find ways to reward learning rather than just success. Currently there are few feedback loops in place to reward those secondary innovators who adopt the ideas of others and reinvent them to suit themselves. Similarly for those who have experimented but failed in some way there are rarely any formal processes to recognise what was done and to garner from it as much learning as possible. This links strongly to the discussion within the first theme on reputational risk. Until experimentation can be rewarded unconditionally, innovation will continue to be difficult in an outcomes-based culture.



Learning questions: reward and recognition

What meaningful agendas does our project represent?

How would we know if our project was 'healthy'?

Is this sufficiently clear for us to judge?

What internal systems of recognition and reward us?

What external systems of recognition and reward currently drive us?

How do I connect my sense of achievement to that of the group's?

For Policymakers

How might we reward learning and experimentation?

What projects might we create that can self-incentivise?

How might we reward successful individuals whilst encouraging collaboration?

Theme 5: Capacity Building in the Unknown



Capacity building against multiple agendas and in the unknown

Breakthrough projects result from capacity that has been built over time against multiple and changing agendas. By capacity I mean the capability to act and respond appropriately to an issue where the issue can change. In all but one learning history, a period of capacity building stretching back to the 80s laid the foundation for the innovations described today. And the agenda against which this capacity started to be built was different from today's agendas

Charting the chronological history of a project results in a much longer view than is normally associated with a best practice account. Whereas the latter describes the good practice as a *fait accompli*, the former describes the experiences, often stretching over years that led to the development of that practice. A common reaction to reading the learning histories then is one of surprise, and sometimes frustration, at how long it has all taken. Of Barnsley:

It actually started in the 80s. Looking at the result now that is great but it's a long time

B&NES Participant, Session 3

By taking the historical view it quickly becomes clear that what is significant in understanding the project is not the agenda it might currently be addressing – for example carbon reduction - but the agendas against which it was originally developed.

Nottingham, Kirklees and Southampton had all shared a common history of political championing on 'green issues' in the 80s. This had been expressed in different ways: in Kirklees an environment unit was set up in 1991³⁰; in Southampton the 'greenways' project was set up to safeguard the green spaces in the city; and in Nottingham a green charter had been published in 1989 in which the council made several promises to address issues that were at that time termed 'green'. The result was that by the time the

³⁰ Set up in 1991. My details on the exact history are sketchy as the Kirklees learning history explains.

global action plan on sustainable development percolated into local authorities in the form of Local Agenda 21³¹, these authorities were already 'ahead of the game'. This early commitment to the green agenda created the conditions under which Nottingham could identify and put climate change on the agenda well ahead of it becoming a key issue of our times. In the late 90s, when he was asked what theme a forthcoming millennium conference on sustainability should have, Steve Waller remembers replying:

Climate change is an up and coming subject for local government

From Nottingham Transcript

He comments:

So that was nearly 10 years ago – now that was probably not quite true at that time, it was an idea slightly ahead of its time ...it seemed a genuine issue...but I couldn't have predicted then what was going to happen 10 years later

From Nottingham Transcript

If Nottingham showed a clear trajectory from green capacity leading to innovation, other histories did not. There were overlapping and shifting agendas at play in Barnsley, Southampton and Kirklees. Barnsley and Southampton were influenced in different ways by the issue of fuel security. Barnsley explains itself partly in relation to diminishing North Sea gas:

Now land locked Europe don't have a fuel rich North Sea and so has been doing other things for decades. But because we've got it there and we've just tapped into it – just convert to gas, burn it in power stations...But there's a kind of a short-termism behind all that isn't there, that you're not protecting your asset and as a consequence of course its nearly all gone now.

³¹ Unveiled at the Rio Earth Summit in 1992, Agenda 21 set out a comprehensive action plan for global, national and local government agencies and organisations to address sustainable development. Local Agenda 21 was the Local government version of this plan.

And the history of the Southampton scheme can be traced all the way back to the Department of Energy digging a geothermal well in nearby Marchwood in the late 70s as a direct reaction to the global fuel crisis. By the time concerns over global fuel supplies had waned the interest in the geothermal supply had been adopted by those with more local agendas.

Converging and overlapping agendas was a common feature of all the histories and this occurred at the macro and at the micro level. In Kirklees the 'green' orientation of the 80s started to come together with the social agendas of regeneration and tackling fuel poverty in the 90s. And it was the confluence of these agendas at a particular moment that led to and sustained the breakthrough of the solar project. It is important to distinguish that generally agendas tended to converge rather than merge. The Merton history illustrates this point well. A coalition of a campaigning NGO, the local authority and a privately owned solar company came together in support of the rule. Clearly there were commercial and political interests at play here but these were compatible with each other. In Southampton the scope of the 'green' agenda started to widen from landscape to include energy in the 90s. At the micro level this was accompanied by the shift in the agenda of one of the key actors, Mike Smith. Mike was a financial director at Southampton whose initial interest in the first well had been pragmatic. He wanted to *'know what was going on up there'*. Over time however his own position had become much more environmentally motivated. When the explorations of the second well showed the aquifer to have limited capability as an energy source he describes his disappointment:

Oh we were [guttled] and we put a lot of time and effort and I must admit I'd changed from a sort of cynical sceptical accountant to a very enthusiastic sort of environmentalist.

Not every person in the learning histories started as a passionate environmentalist or ultimately became one. For some, as in Kirklees, issues of social justice were more to the fore. However overall there was a willingness to embrace the carbon reduction agenda. What was distinctive about all the examples then was that over time, there were

multiple agendas at play in mutually satisfactory ways.

Against these shifting agendas, teams and individuals came together in ways that increased their capability to respond to and develop the direction of the issues they wished to address. Varied responses erupted from the particularities of the individual personalities and the situations they were in. At Southampton, when we discussed the different innovative projects in local authority, Bill Clark remarked that these examples had often been catalysed by a particular set of circumstances:

Bill – all the examples you’ve quoted and you’ve quoted a lot of them – the catalysts have been different – it’s often not easy to put your finger on them – nor indeed when that catalyst came into being

From Southampton Transcript

This observation starts to work toward a crucial point common to all the histories. Not one was singularly motivated by the issue of carbon reduction over time. Common agendas – for example fuel poverty, energy security, and sustainable development - ran through the histories but each was unique in how these agendas interacted with each other and with the motivations of the individuals involved. As a result these interesting projects were all different – all part of the ferment – that happened as a combination of capability meeting context in a unique way.

Merton came on the scene quite quickly. And you think – ah – I wish we could have done that...what’s the trigger that made it happen there? – it’s just a different direction a different theme has been developed.

From Southampton Transcript

Taking this analysis into the present context suggests a couple of observations. First that finding ways to build capacity and resilience across local authority organisations in how they respond to the carbon reduction agenda is as important as the agenda itself. The potential to act, if cultivated in this way, can be lighter on its feet with a shifting context than say a team specifically put in place to meet new targets on climate change. This work, and work on the Lowcarbonworks project in general, has started to scratch the surface of how this ‘potential to act’ might be cultivated. The small group work with B&NES was framed in this way, but it was a short experiment. Clearly there is more

work to be done here.

Secondly the analysis suggests that because of its shifting ground, a long-term change project can only be understood retrospectively, and even then that understanding will be coloured by the context of the present day. As a result, when one is in the midst of a process of change, it can feel messy, improvised and at times meaningless. This is a point that I have made to participants, particularly those local authority sustainability champions, when they have talked of feeling overwhelmed by the task they face.



Learning questions: capacity building and multiple agendas

Macro level

What contextual factors are shifting currently that might enable/inhibit the carbon reduction agenda?

Project/Group level

What meaningful agendas does our project represent?

What other agendas might overlap with this?

What challenges or windows of opportunity does the shifting macro context open?

Where are we building the capacity to act?

Individual

What groups or groupings do I belong to that show a capability to act?

Theme 6: Chance



Chance

All the learning histories identified chance happenings that influenced the direction of subsequent events. Though these happenings did occur by chance, the potential for something happening had been increased by the vision and determination of individuals involved. So the chance, or in some cases the luck did not stand in isolation. It was made.

The previous meta-theme described how breakthrough projects seemed to result when capacity and context came together. Bill Clark at Southampton had observed that there was often a catalyzing factor. By this he meant a palpable advantage: funding, a cheap fuel source, an already dug well – that lowered the barriers and thus enabled the groundbreaking project to occur. This view is to an extent confirmed by the learning histories that chart the importance of such factors in enabling projects to happen. But the notion of change as a process of overcoming a series of barriers that stand in the way of a goal is at the same time refuted by the previous argument that there is no one agenda. If there are multiple agendas over time then there cannot be just one commonly understood barrier. If anything there are several. And over the project's lifetime there are several catalyzing factors that propel it forward. Such factors are necessarily constructed. They are recognised later. In Southampton a light bulb moment is described when the team realised that the geothermal element was merely the catalyst and the district energy network was what was important:

That was one of the light bulb moments and you think, yes it's the network really that's important,

From Southampton Transcript

The geothermal element had started as the focus of the scheme and it was only over time that it became recognised more in terms of a helpful enabler, the '*sizzle in the sausage*' as one interviewee put it. The light bulb moment does not actually relate to a moment in time but rather an evolution in the thinking of an individual or a team. It is significant, but it is abstracted. It cannot be actually pinpointed to a moment of experience.

The final meta-theme discusses those catalyzing factors that as yet are not abstracted but that have been described in terms of the experiences of the protagonists. They are moments or events that seemed pivotal in each history. The most obvious of these is the story of the catfight in Merton that led to a chance meeting at the vets that in turn led to a crucial conversation occurring with the Minister. As the Chapter 9 on Myth describes this chance moment was already understood by the protagonist as a crucial moment of synchronicity. Similar, though more understated, moments of chance could be identified by protagonists in the other histories. In Southampton, Mike recalled how a key piece of funding was secured as a result of a chance conversation with two EU conference delegates over coffee in Italy. And in Nottingham Steve recalled how something he happened to have been reading at the time had influenced his idea for the Declaration.

SW: but I also definitely remember reading about a pledge scheme that'd come up for the private sector – but it was broken up into certain phrases – 'we recognise' 'we welcome' "and I thought I can use that" and that's how the model for the Nottingham Declaration came into my [mind]

MG: So it seems that there's a question revolving around your mind a bit – and you're quite open – and then you read something and it kind of draws together – it can appear as luck and in a way it is luck....

SW: and in a way it isn't. In a way it's a culmination of experiences, which only I might have had because of the interest and the position I was in. It would only ever have occurred to me because of that unique situation

The final quote starts to delve into the relationship between luck and the making of that luck. It was only because he was open and searching for something at that time that SW could connect the reading of the private sector pledge scheme to a new idea for local authority. Similarly in Barnsley ideas from one place helped inspire their translation to another. Dick identifies his participation in the European wood-fuel tour as a key moment of serendipity. Yet, his ability to link that serendipitous visit to a strategy that worked back in the UK – to borrow Steve's words – relied on '*his experience, his interest and the position he was in*'.

In Southampton and in Merton the moments of luck that were described were less to do with the idea and more to do with realising it. The cat and coffee moments occurred to protagonists who were respectively searching to find a way to make something happen. Mike might have discussed Italian culture at the coffee table. Or on meeting his friend at the vets, Adrian might have caught up on old times. But instead each of them seized that opportunity to go on searching in that moment. So it was their determination to find a way that drove these conversations in the direction of realising a vision. If these conversations had led nowhere, as well they might, then the chances are they would have gone on searching.

As I described in an earlier chapter, when I present Merton to different audiences, there has often been some debate as to whether the Merton Rule would have gone through had there been no catfight. When I met researchers at SPRU (the visit itself I described in Chapter 7) this argument was pitched at the contextual level.

If Randolph hadn't been in a fight and got hurt I find it hard to believe that the Merton Rule wouldn't have gone through. I mean If the Minister had said no, there would've been an enormous stink and there'd be lots of lobbying and maybe a few years later it would've happened....[goes on to say how at that time there was lots of political push on microgeneration]....I mean contingencies matter as to how and when things happen.

SPRU Researcher during seminar on Merton

The researcher is right. His point is referring back to the point made in the previous meta-theme which suggested that when capacity and shifting agendas come together favourably then change will erupt. The point being made in this meta-theme is about the actual specifics of how events erupt in such a landscape. From the analysis it would seem that indeed there are events that are somewhat serendipitous, random and unpredictable. However they have occurred through the practices of individuals who are determinedly searching to create or realise a vision. It is these practices that increase the probability of something significant occurring. When it does it is made unique through its happening. The event is separated from the search. Plucked from the field of possibility it becomes historic – a unique and unrepeatable event that creates a tale of

vision, chance and determination.



Learning questions: chance

What chance or serendipitous moments have I experienced?

What was the quality of them?

As an individual, how might I recognise or create such moments in future?

How do I work with them? What stops me acting on them?

As an organisation when do we manage to work opportunistically?

As an organisation, how might we recognise or create such moments in future?

Reflecting on this Analysis

Quite a long analysis has been presented in the form of six rich thematic areas that are relevant across the five innovative carbon reduction projects featured in this research. I like the richness of these meta-themes, their narrated tone and the fact that they are still warmed by participants' voices. However they are long and I notice the pressures there are to reduce them to bulleted definitions. With an analysis of this kind the dangers of a collapse into a positivist statement are greater than with narrative. As I present these themes back to the system now I do so with caution.

The analysis I have presented here has been drawn from human stories, and as such it emphasises the experience of change. The themes focus primarily on how individuals and group navigate uncertainty and, to borrow again from Bruner, the 'vicissitudes of intention'. Human stories have a universal ring to them and so too does my analysis. When I present it, people recognise it. On the Lowcarbonworks project, my colleagues Gill and Michelle commented that it resonated with what they were finding in their work with breakthrough projects in completely different sectors. Gill had been writing a learning history about the building of a low carbon lingerie factory in Sri Lanka; Michelle was following the story of how a major food producer was experimenting with a waste-to-energy technology in Cornwall. Though they may well have chosen different words, aggregations or groupings in their analysis, they reported a resonance between their stories and these themes. This points to the interesting paradox that from unique and situated narratives that, by definition, rely on particularity, detail and context come general themes that resonate widely and are recognisable. However these are themes not normally articulated as being important to innovation. So this analysis, just like other aspects of this research is performing a reappearing act. It is reappearing the human dimension of innovation – a familiar story presented in an unfamiliar, but legitimised way.

I have put this analysis together with an eye to it having both practical and theoretical value. The learning questions and the narrated presentation are supporting the practical. I write them to invite a participant into the analysis and to engage with it. How well did this work for you as reader I wonder?

As I wrote I tested the analysis myself against a few personal projects I had in mind. I

found that there were resonances but these were not confined to one project but to a medley of my ongoing and past experiences. Like the histories I suspect the themes echo into the context of the reader in a complex way. They do not make up a recipe for innovation. They are more like a set of relevancies. Familiar with them as I am now, I find that one theme or another often pops into my mind during conversation or it informs my actions. Sometimes I voice these links and other times I do not. They are then, part of an analytical patchwork that helps me to make sense of what I am experiencing. Most readers however will not internalise these themes so profoundly. So the pragmatic question remains as to how to frame, present and work with an analysis like this so that it has practical value. Though in the next chapter I describe my small group work with B&NES where we did some work together on themes and learning questions, I feel that this avenue of inquiry has only just begun.

I am proposing too that this analysis has value theoretically. It supports the view of change that is being presented in this thesis namely that it is unknowable, uncontrollable and of limited meaning when discussed at a distance. Stepping into the experience of change bears little relation to how it is theoretically conceptualised. The inside experience of change is about relationship, opportunity, disappointment, learning, experimentation and endeavour. It is all about possibility – good and bad – rather than certainty. In Chapter 13 I will revisit theory in the light of this analysis and the learning history work in general. In so doing I will be expanding the theoretical scope of this open-system approach to learning history.

12. Questions about Theory in Practice

Learning for Us

A Key Event

The B&NES learning history work is the subject of this chapter. This work, which took the form of four seminars spread over six months from June – October 2008, has been mentioned several times already and was very significant for this research in a number of ways. First it was an important site of inquiry into the central question of how this learning history process might accelerate learning at the institutional level. As the work was sustained over time with a group who shared the same organisational context, it offered a real opportunity to engage with how learning history work might bridge from the past experiences of one set of local authority organisations to the present experiences and decision-making of another.

However, because it happened late in the day it also represented a site of inquiry where I could fold in some of the learning and deepening questions that were coming out of the research so far. I had the opportunity to test afresh some of the conclusions of the research. For example the analytical work described in the last chapter suggested a bottom-up theory of change. The seminars at B&NES then offered the opportunity to test these back in a different part of the field from which they had come. But I found this work also led me to road test my own commitment to the ideas and learning that had been developing for me in the course of my research. So if ideas like polyphony, innovation journeys and ‘insider/outsider’ research were important to me now from my work so far then how did that play out for me in practice? I didn’t go into the B&NES work with this well-structured question, but I found the question of my commitment to my own ideas playing out there over and again.

Here then was a fresh set of people engaging with material largely co-created by

colleagues elsewhere in the same institutional field. Here too was a researcher bursting with a rich experience of her research journey so far. This chapter discusses and reflects on what the learning for us was.

I will do this in three parts. Each part will describe quite factually what happened. Some parts will draw on extracts from a learning history I wrote about this engagement. Then after each part I will reflect on this drawing out some of the main learning points.

Pre-work at B&NES

Though the B&NES work centred on four seminars that started off in June 2008 my first contact with the council started much further back than that, in April 2007.

In Chapter 3, I described how after a walk in the woods I had written in my journal:



March 27th 2007

I realise for example it'd be most interesting to run the case of Merton by people perhaps in our local council B&NES or in Bristol and see what they make of them.

A few weeks later I heard that people from Woking would be in Bath to give a lecture and I planned to go along. And just before going along a friend dropped me an e-mail:



E-mail from Michelle, April 2007

Hope the Greenlight lecture is good tomorrow. If you get the chance, try and ferret out a lady called Jane Wildblood, who should be there - she is the one and only person working on sustainability issues for Bath council and used to work at Greenpeace. A really good lady - might have a few good 'stories' for you!

Jane was indeed at the Greenlight Lecture, valiantly fielding questions as to why her council had not done the same as Woking. At the end I introduced myself to her and we arranged to meet. When we did a few months later it was clear that the goals of the research I was doing in general fitted very well with the context of the challenge that was facing B&NES. A new administration had been elected in May and it was one that had

pledged to lead on green issues. Jane and others at the council were now actively putting together a set of initiatives so that the organisation could start delivering on the pre-election pledge to reduce carbon emissions by 2% per year over ten years. What was important was to underpin these initiatives with an increasing organisational awareness and ability to act when it came to the strategy. From our conversation it felt we were 'of a similar mind' that achieving these targets would necessitate culture change and a capacity to act that learning history work might support. The question was how to build in the research in the best possible way for all involved. Follow-up meetings took place in the autumn with Jane and on one occasion her boss David Tretheway. In these conversations we discussed the organisation, the different projects underway and the different groupings that might benefit from working with the learning histories. I then set out a proposal with different options for how we might work together. In December 2007 Jane responded confirming that B&NES would be interested in working with Lowcarbonworks by first attending the learning history workshop in February and by taking the option of running a series of small group learning history seminars subsequent to that.



In Feb 2008, Jane and David attended the learning history workshop and were particularly enthusiastic about the event. Subsequent conversations between Jane and I took on a new urgency as we sensed a golden opportunity for the broader change agenda within B&NES which was rapidly gaining momentum.

Figure 49: David Tretheway at the Feb workshop

After the workshop we met again at the local coffee shop to further tease out the objectives of this piece of work and to find the best level for our ambitions. Jane was particularly keen for action – and to find some way to link this work to the strategy the Council was now trying to deliver. I wanted action too but was concerned that if we linked the group too much to an outcome this might curtail the opportunity for frank conversation and collective reflection. So we agreed that the work would be seen as a phase of capacity building that would support and flow later into more target-oriented programs. We agreed too that participation would be optional. The

group would self-select but Jane would set about inviting and encouraging people to come.

Reflecting on the Pre-work

I include this build-up because it is normally so easy to leave something like this out and because it shows some important things about relational work as well as the possibilities for deeper 'insider'/'outsider' work that can be opened up by learning history work. It was only as time went on that I started to realise that the meetings to shape the seminars were every bit as important as the seminars themselves. This is reflected in the time we took for them. Returning to my field notes I see to my surprise that over a period of nineteen months from June 2007 to a final debrief in March 2009 Jane and I had eight different meetings – two of which included other council officers. So more time was spent in those meetings than at the actual seminars. Their scope too was broader than the mere running of seminars. We were strategising on how best to serve a shared agenda of building capacity to tackle climate change. Once the seminars got going we reflected each time as to how they had gone and discussed what we might do next time. So the meetings were providing an opportunity for time out, for collaborative reflection and therefore for learning. They took place mainly in a coffee shop outside the council offices and indeed this felt apt as our discussions often felt to me to connect more to a joint change agenda rather than to the specific research and organisational agendas that we each represented. This then was the piece of work that most reflected 'insider/outsider' research for me. However it was only made possible by my first cycle with the learning histories which had made me 'insider enough' to approach Jane and have a useful conversation in the first place. It also started to strike me that in its nature this work resonated with some of the innovation journeys I had been charting in the learning histories: the sense of shared endeavour, the moments of opportunity, the converging agendas, even the coffee shop venue all echoed with the stories I had written and reminded me to value and notice these parts of the work and give them some importance.



'Insider/Outsider' work

Work with learning history can itself open the door for quality 'insider/outsider' work where shared agendas and re-appeared relational work lead to a new, rich site of learning.

The Seminar Work

Jane made the Lowcarbonworks research work overtly part of the sustainability strategy within the council. She and her support team then worked tirelessly to arrange diaries, convene attendees and to raise the profile of the work within the council. As a result of this effort, four divisional directors from the council and a further three officers were present at the first meeting. Further attendees joined as the seminars went on. Unlike the workshop, the energy in convening lay with the 'insiders' rather than with me. My 'outsider' work focussed on the seminars. I planned each session carefully and reflected in detail on each one, individually and with Jane. Sessions were taped and I listened back and made notes after each session. There was a positive energy to this work. I saw this as a golden opportunity to be creative with others without putting anyone at risk. The framing of the work as a piece of research gave us this freedom.

The four seminars stepped through from an introductory overview to a series of experiments centred on the learning histories (we chose Barnsley and Southampton) and, in the later sessions, on the thematic analysis. With each experiment I tried a different way of working and a different blend of structure, group work, presentation and so on. For example in one session we worked in small groups responding to Southampton and then as a group went into detail on the meta-theme 'Risk' and the learning questions associated with it. The experiments and mixing of activity mostly worked well. The sessions were lively, rich and unpredictable.

At the end of session 3, we had jointly agreed that the final session should be a 'drawing it together' session going over what we had covered and addressing questions of 'what next'. For a variety of reasons it had been poorly attended. Planning the final session I wanted to maximise the value of the sessions so far. There was always a sense of too

little time. I listened back to the taped conversation of session 3 and was suddenly struck by how the meta-themes that I had presented as being important to innovation were being demonstrated in the words of the participants, for example:

Coalitions: “We have a strong local service partnership”

Champions: “I’m here because Jane twisted my arm into coming”

Risk Transfer: “we’ve got people doing the drilling [to explore thermal potential] and they’re paying for the privilege”

Converging agendas: “Can we exploit the credit crunch to find the right time to start talking about reducing costs...?”

Working with chance: “project xxx is delayed now so that opens up a window”

And so on. This group was already demonstrating innovative talk and capability and it seemed important to reflect this back to them and challenge the view that change lay sometime in the future. It was at this point that I thought that if I really believed in learning history then the only way to reflect this back was to summarise the learning we had done together as a history. I quickly wrote the learning history, shared it with Jane and then with a slight shudder I sent it back to all participants in advance of the final session.

On the next few pages I include an excerpt from that history that shows: firstly the style and level of reflection I shared back to participants; second, it shows an important aspect of the work which was to do with trying to create a space where different kinds of conversations – technological and otherwise – might take place.

Learning history excerpt: sessions 1 and 2

The Storyline of this History

The story of bringing learning history to B&NES who were part of the new wave of councils acting on climate change. This authority were currently building capacity quickly and starting to take a proactive and leadership stance with regard to climate change....

The Seminars

June – October 2008

Seminar 1

When: June 2008

Where: Bath & NE Somerset Council Offices

Who: A group of 7 officers drawn from across departments and including four divisional directors.

The purpose of the work was set out at the first seminar as follows.

Centre for ACTION RESEARCH IN PROFESSIONAL PRACTICE

Purpose of this work

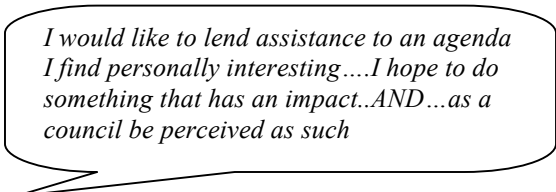
For Research agenda	For BANES participants
<ul style="list-style-type: none">• How can small group work with Learning History be used to effect cultural change and build capacity to innovate for carbon reduction• What works? What doesn't work?• How do those in the field relate to the findings?	<ul style="list-style-type: none">• Study relevant examples of change• Collectively explore common themes for innovation and relate these to your organisational setting• Get space for reflection• From your side...???

Increase options & potential for acting on climate change

This was the official statement of why we had come together. When we introduced ourselves there was a more informal set of reasons why people had come to the meeting that ranged from having had their arms twisted by Jane, through to personal passion, the desire to act on existing ideas and the desire to take a lead on sustainability and, as a council,be seen to take a lead.

Theme: Personal & Organisational views used interchangeably

Previously I'd worked mainly with sustainability champions in local authority organisations. Now I was working with managers and directors higher up in the organisation. I had wondered how the conversation might differ as a result. Would it be more stilted and formal?

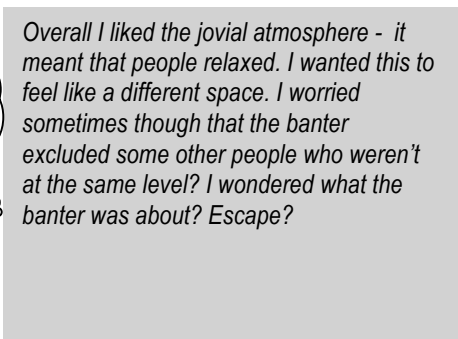


I would like to lend assistance to an agenda I find personally interesting....I hope to do something that has an impact...AND...as a council be perceived as such

The language was sometimes reflective of the high-level responsibilities some people held but the atmosphere was not formal. There was a friendly, sometimes jovial atmosphere in the room and this continued throughout the seminars. There was a mood of escape and chatter. Banter sometimes over what had gone on that morning or in other meetings to come. Sometimes it took a while to settle – but it always did.



RR



Overall I liked the jovial atmosphere - it meant that people relaxed. I wanted this to feel like a different space. I worried sometimes though that the banter excluded some other people who weren't at the same level? I wondered what the banter was about? Escape?

Q: To participants: Any comment on this?

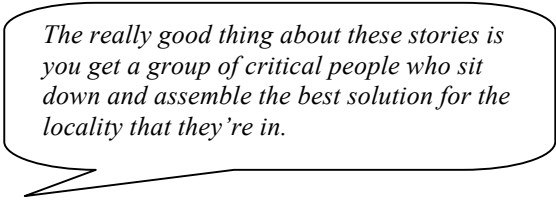
I gave an overview of the five learning histories featured by the research (Merton, Nottingham, Kirklees, Barnsley, Southampton). Like at the Workshop there was a feeling of awe and frustration at these examples. One participant exclaimed:

"We've missed so many opportunities!"

And as a group we went on to discuss the need to

"Start with the missed opportunities and then start to see the new ones"

I stressed too that the learning histories were brought in not as a set of icons to live-up to but rather as an offering into the mix of that Council's challenges. They were a resource to be drawn on rather than a stick with which to beat themselves.



The really good thing about these stories is you get a group of critical people who sit down and assemble the best solution for the locality that they're in.

At the first seminar what quickly became obvious was that there were different levels of technical knowledge in the room. One or two people were very well versed in the technology, whereas others were clearly daunted by it one person admitting that they were '*technically illiterate*' I went away with the question of how to keep this valuable technical expertise in the room without it dominating or excluding others. And Jane acted on it by organising a "Low carbon technologies for beginners" in advance of our next session.

Theme: Knowledge spanning is needed to enable informed conversations

The second seminar was designed then with questions of participation in mind as well as an intention to start experimenting with the learning histories that had been written.

Q: To participants

Any comment on this first session in general?

Seminar 2: Biomass at B&NES – It IS a brainer

When: July 2008

Where: Bath & NE Somerset Council Offices

Who: A group of 8 officers (2 additional participants from planning; 1 from waste)

The second session featured the Barnsley learning history. Participants had agreed to read the history in their own time and I was heartened – surprised even - by the fact that most people had managed to do this by the next session. Though some participants had found an hour not long enough.

Barnsley
It's a no-brainer!

A Learning history
Issue VWS – Workshop Version

Nr. 3 in a series of learning histories on the subject of "Innovation for Carbon Reduction" in or connected with Local Authorities.

July 2007

A jointly told tale

Margaret Gearty (University of Bath)

Based on the perspectives and recollections of
Dick Bradford
(Barnsley Metropolitan Borough Council)

with added perspectives from:
Robin Ridley (South Yorkshire Forest Partnership)

Well it seemed to imply 'it just happened' I didn't get a feel for the complexities involved

J. said what a lot of people say when they first find out about Biomass. It's too easy ...if you can manage to put those organisational bits in place

The bit that is a brainer is getting all that [the organisational support] in place

It actually started in the 80s. Looking at the result now that is great but it's a long time

Then using an approach called De Bono's 6-hats thinking we considered the provocative statement "**Biomass at B&NES – It's a no-brainer!**" from different kinds of viewpoints. The purpose of this was twofold. At this session I wanted to explore how we might take the lessons – technological and all - from one context to another using the learning history. So it was a question of exploring what we might directly learn from Barnsley about using Biomass. This was the primary aim. What resulted were a series of posters looking at the question of Biomass @ B&NES. Ideas, questions and emotions were raised and together this formed a snapshot – like a pre-feasibility – of the opportunities, pitfalls, fact and information that might be needed to start to take on wood-fuelled Biomass projects within B&NES.

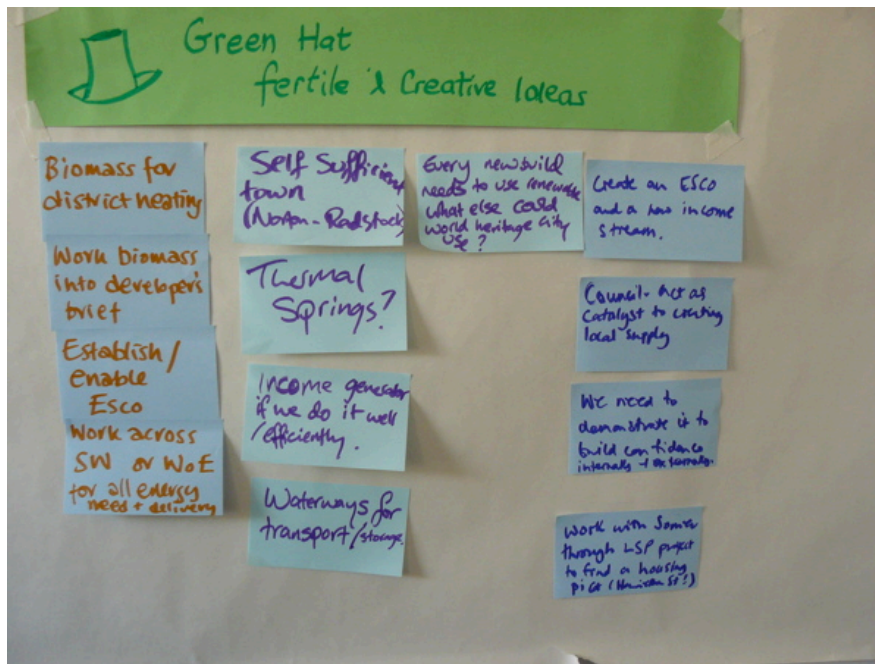


Figure 50 An example of Green Hat thinking on BIOMASS

The second reason I wanted to use De Bono was to illustrate the different ways of discussing and moving forward on an issue. I hoped to show that, by thinking together from different perspectives we might approach a problem in a different way with a more rounded conversation – for example one that would include the technical, the organisational and the emotional. By naming and valuing the different perspectives, I explained in session, we might have a more constructive conversation and avoid the common pitfall of talking past each other, or of emotion or caution masquerading as fact.

Theme: Having a rounded conversation



Nice idea - But did any of this leak out into the organisation? It is so hard to assess impact with something like this.....



Figure 51: Is biomass a 'brainer' at Bath?

End of Excerpt

The final session

The final session was important. With time running out Jane and I shared a strong desire for this work to be sustained in some way after the seminars had finished. This fitted with my search for scale and enduring consequences in the work as discussed in Chapter 5. And I had one final research experiment in mind: I planned to work more deeply with the inductive themes, to test out the learning questions with participants and to see if by working appreciatively with them this might raise awareness of where in the organisation they already had the capacity to innovate. Also I needed to get feedback from them on the seminars overall. When I write all this down now I am a little embarrassed. I was far too ambitious. And, to cut a long story short, we ran out of time.

Perhaps it was a coincidence, but all ten participants did turn up to that final session and I wondered if it was because I'd sent out the learning history to draw them in. Most of them had read it and I felt it contributed to the mood of what was a rich session. I have described in detail in Chapter 8 some examples from the conversation where I felt that we were as a group moving to new understandings as to what was possible, what was of value and how this work might continue. Another example of this was that, in this final session, there was increased recognition for the relational work Jane was doing in the organisation, pretty much single-handedly, to push the sustainability agenda. The language moved tentatively from 'you' (pointing at Jane) to 'we' at a few points during that meeting. The work with the learning questions stimulated these conversations though I was frustrated to find myself hurrying through them. Time ran out and I didn't manage to get the feedback I wanted on the overall experience or to return to the question of learning history as a means for change. One director who had attended all four sessions hurried out and said: "thanks – these were really first-class" and I walked away with a small glow but no real evidence of how they had helped him. Though there were many threads left dangling at the end of the final session, there were glimpses in this work of many interesting possibilities. But in the end my ambitions and the time I had just did not match. Like many a learning historian before me I had just run out of steam.

Reflecting on the seminars

The seminars shed considerable light on the substantive point of how learning history might support learning from one site to another. Feedback from participants, my field notes and joint reflections with Jane helped to build a picture of the kind of value this work was providing. Participant's feedback forms all mentioned that they valued the conversations they had at the seminars and the relationships formed there. As one participant wrote:

We established a good internal network to drive these challenging agendas forward

From participant feedback, early 2009

Some also liked taking 'time-out' to think and converse with others with whom they would not normally speak. The cross-hierarchical nature of the seminars, the presence of the directors and their willingness to speak openly was very much appreciated. So far then, it might seem that, like any good action research, it was the opening of a communicative space that was what mattered. However several participants commented directly on knowledge they gained from attending: about schemes elsewhere, about low-carbon technologies and about the climate change agenda itself. This had been supported through the learning histories themselves as well as by Jane's additional work to bring participants up to speed on technology outside the sessions.

Gained a good understanding of the technical issues around retrofitting biomass and the length of time it took to implement changes

Learned from the experiences of others (in the histories)

I realized how this corporate priority (tackling climate change) is different to the others as it is new and more rewarding

From various participant feedback, early 2009

So participants' knowledge had been enhanced also quite conventionally. They knew

more stuff afterwards. Though the 'learning' in learning history is conceptualised as a dynamic process occurring in the company of others, my feeling is that it is powerful because of how it brings different kinds of knowledge and process together. And in this work there has been a strong theme about the practice of 'expanding conversations' to achieve this. In session I noticed for example how hard it was to have technology on the table without it dominating and blinding out organisational issues. And vice-versa. So I worked to redress this. The B&NES learning history extract recounts how, in session two, I used de-Bono's 6-hats thinking in order to expand the conversation so that hard facts, ideas, emotions and so on might all have equal place. Similarly it describes how Jane organised a catch-up "Lowcarbon technology for beginners" session so that less technical people might adequately be able to participate. So we were not only expanding conversations in terms of technology, but also in terms of everyone participating, and in terms of being inclusive of different kinds of thinking.



Expanding conversations

The learning history process can aid learning and innovative possibility by expanding the conversation so that the technical, psychological and social aspects can be on the table simultaneously. In narrative this will happen naturally, but there are practices too that support expanded conversations.

Enduring consequences?

Five months after the seminars ended, in March 2009, Jane and I met at a local restaurant to go through the feedback forms and reflect on the overall cycle.

The forms were encouraging. All respondents reported taking actions outside the seminars that ranged from having conversations about biomass to lobbying to get carbon reduction targets put into strategic plans. Most striking of all was Jane's feedback. She reported that some attendees were now showing an increased confidence to speak up for the climate change agenda. For example three of the four directors who had attended the seminars had subsequently attended a workshop relating to Jane's other carbon initiatives and all of them had been crucially supportive.

It was an excellent workshop, with clear actions agreed to tackle barriers to change, largely because of their participation. They really challenged some of the 'status quo' issues that get in the way of progress.

Jane reflecting on seminars, via E-mail, 11 Mar 2009

This top-level support has every chance of being formalised in the future into a group who will oversee the budgeting of carbon management projects. Finally Jane herself, reported that the work had helped her feel more confident and emboldened:

Gave me more confidence I think - I felt braver about saying some challenging things to more senior colleagues than I think I might have done outside this space. I definitely remember thinking that I was being much blunter and making more radical suggestions and requests than I normally would in work situations. And now that I've done it inside [the seminars], I now feel more confident doing it outside. Also, attending these sessions has helped me to develop closer working relationships with a couple of key people in the group, which is really bearing fruit.

Jane reflecting on seminars, via E-mail, 11 Mar 2009

This echoes closely with Thurstan's (from Brighton & Hove) comments on the 1:1 work. He had reported how his work with the Merton history helped him feel more 'emboldened' to act in meetings. Though he still had to take the step of being bold alone. In this case Jane could practice being bold with colleagues inside the room and could then continue being bold outside of it.

Final Reflections

The work with B&NES opened up a rich site of inquiry into the different possibilities for working with learning histories and the nature of the new conversations that might be opened up as a result.

I experimented with structuring discussions around the histories and working with the thematic data from the research. Both approaches stimulated lively and engaged

discussion. What I found was not conclusive as to there being a 'right way' to work with histories. I worked instead to knit the histories into the group's learning as appropriate. I see the space now less as one where participants could test out ways of working with learning history and more as one where they could start to negotiate and create new narratives for themselves and their organisation. What was crucial was having a series of meetings rather than just one in order to do that. In Chapter 8 I described how the rich conversation in the final meeting seemed to result from a move along Wittgenstein's ladder from the familiar to the unfamiliar. By the last session the iconic histories were left behind and we were now talking about the challenges of this organisation. My attempt to open up possible new narratives for this organisation did, for moments at least, work. I repeat the earlier quote from this session that I shared in Chapter 8:

My point is, rather than surprise, more a pleasure really. Reading these examples you think "wow that is a really big jump that they made", but actually if you look at what we are doing in dept xxx, we are doing it and I am really pleased to be part of this move, this change and also it's great to have a discussion with the people who want to change

Session 4, B&NES Participant, from audio of closing round

Here the participant is speaking a new narrative of achievement in front of a group of directors who had earlier said that this organisation wanted to be 'behind the curve' on climate change. She is describing too a sense of belonging to a wider movement of change that goes beyond her council. This was exactly the kind of participation, inspiration and celebration I had sought with the open-system learning history. For a fleeting moment at least the vision and the evidence lined up.



Accepting the victory narrative

And yes, yes, I know this is a victory narrative. I'm tiring now of my postheroic quality criterion. There was lots wrong with this work: I ran out of time, I didn't always do what I set out to do, I lost hold of the conversation more than once and those conversations weren't always multi-vocal. But there was something really great about this work too. And I've decided for once to celebrate it!

Finally the small group work described here has implications for the theme of expanding scope within action research that has been discussed throughout. Whereas in Chapter 4 I described how I would seek increased scope through the creation of multiple

distributed events, here I am arguing that I also quite actively sought an expanded scope (of conversation and action) with those events. This chapter has been all about trying to broaden the learning for 'us' in all directions. The next chapter takes us down a very different avenue for increasing the scope of the work that has to do with learning for 'them'. It will discuss how the learning from the research might now be fed back into the academy and the field of theory.

13. Questions about Theory in Theory

Learning for them

Theoretically where have I been?

In Chapter 3 I described the various theories that prepared the ground for my exploration of how shifts to low carbon technology might come about. These were theories that ranged from the processes of the individual (e.g. decision theory) to the collective behaviours of a group (e.g. organizational theories about routines) to the dynamics of change at a broader sociological level (e.g. institutional theory; diffusion theory). Furthermore my survey of the literature paid particular attention to the sociotechnical axis – to theories that, one way or another, incorporated technology in their discussions. Looking across this axis I found theories that explained the emergence of new technologies in a way that challenged the notion of the rational actor (e.g. innovation theory, evolutionary economics), and theories that suggested that technology is embedded in social processes that fix it in place (e.g. social construction of technology and actor-network theory). The explorations led me to the Geels' multilevel model of system innovation. I found this theory very helpful in integrating several theory strands and in explaining how sociotechnical shifts at the system level might occur.

With this sweep of theory under my belt I went on to write learning histories and found that indeed in places these theories did fit well to the individual cases I was studying. If you pull out the learning history booklets that are included in the appendix and scan for theory boxes you will see some of the theory links I chose to highlight. Institutional theory and diffusion theory are drawn in to explain the dynamics of how the Merton Rule and the Nottingham Declaration spread and were adopted by local authorities. Social construction of technology (SCOT) theory is linked in to how cultural perceptions of district energy schemes in Southampton have been renegotiated (p. 34). The Geels'

multi-level model is relevant to all histories and drawn into three of them. For example in Kirklees (p. 29-31) I map the sociotechnical regime of “Social Housing” and illustrate how a combination of overlapping agendas and timing created a window of opportunity for solar energy to break through there. And in Barnsley (p. 27) I illustrate how the champion’s ability to talk the language of landscape, regime and niche was key in enabling a new regime of biomass heating to be adopted. The starting observation of the research: that local government is a sector that is somehow creating the conditions for breakthrough projects to occur was supported and to an extent explained through the research. The detailed learning history work showed that, in sociotechnical terms, the local government regime was experiencing a pincer movement of upward and downward pressures that were making it amenable to transition. From above comes the pressure of government policy that is becoming increasingly demanding on the issue of climate change. From below comes pressure from niche projects that have been cultivated by a variety of factors that line up to create the conditions for innovation. These factors include: the organisational unit size of local authorities, the regulatory framework that guides it, the range of multiple agendas (e.g. fuel poverty) that are at play, the size of the estate it manages and the level of partnership working it requires.

Meanwhile as I worked with the human stories I could find parallels too at the individual level. Decision theory was illustrated in the way customers made bounded decisions in Southampton (p. 31). The guiding nature of routines and their role in holding inertia was in evidence in all the histories and particularly in the small group work with B&NES. And throughout, though not always explicitly, I was gently inquiring into this notion of postheroic leadership. With the sense that a new kind of leadership might be expressed in these breakthrough projects I searched for an understanding of what that might look like. For shorthand I called it ‘postheroic’ leadership but was keeping an open mind as to what that actually was. In Merton and Nottingham I reflected on the nature of the posthero and his relationship with ego and humility; in Kirklees I saw postheroic leadership expressed as a leaderless group and reflected on the difficulties with that; in Southampton I found a group that seemed self-aware and effective in their distributed leadership and reflected with them on what this might mean (p.44-46); and in Barnsley, when I met a remarkable low carbon hero I wondered what place a postheroic world might and should make for such a man who displayed heroic qualities?

So starting from theory in theory, I moved along to theory in practice working more deeply with some of the ideas, while others have fallen away. Then with my 'bottom-up' analysis of Chapter 11, I have started to articulate the start of my own theory of what contributes to breakthrough projects in local authority.

Overall this amounts to what I will call a cycle of 'theory in action' and in this chapter I will reflect on it. First I will reflect briefly on what 'theory in action' might have meant for participants. I will then go on to reflect on what it might mean for existing theory. This then is a second cycle of inquiry into theory.

Reflections on Theory in Action

Theory for us

In this section I consider the use of theory with participants in the field. So it is a consideration of what theory means 'for us' in action research of this kind. From this comes a suggestion of where theory might belong in the learning history process.

Theories in learning histories

The question of the purpose of theory recurred at a project and at a personal level throughout the research. In one of our first project meetings a colleague described how she felt drawn to the theory, but that it felt distant when she met with participants in the field. As an action researcher she had to question this disconnect:



March 23rd 2006: The place of theory

From Transcript: Colleague Chris

Context: The Wilber/Ballard matrix has just been presented at a Lowcarbonworks meeting

"A shared inquiry question we have is how does this theory relate to what actually happens when we go in to the meetings because it feels very different".....

She went to say she felt: *"Seduced by elegant theory and a lack of desire to be debased by crude practice ...[and so she questioned] where is the connection between the two"*.

This marvellous question I carried with me through the project watching out for when I was being seduced. And I noticed right from the start that when it came to crude practice, theory had a very different place.

When I started with interviews, I sometimes mentioned theories to illustrate the kind of thinking behind the research. It felt that there was an appetite and an interest in this. In Merton, Adrian and I talked about “Strategic Niche Management” and he asked for more information about it. In Nottingham, when Mike mentioned how neighbouring local authorities didn’t like to subscribe to a Declaration with Nottingham in the name, I mentioned institutional theory and the forces of competition (mimetic) that can arise. We laughed about it. Theory then was only occasionally introduced, mainly in order to illustrate a point and in any case as the interviewing proceeded there was less co-inquiry. As my method chapter outlined I shifted more towards listening more and I saved my theoretical links and insights for the write-up.

But when the histories were written and I shared them back to participants I was surprised by how little they engaged directly with the sections on theory. They did sometimes mention the theory sections but somewhat at arm’s length and somewhat reverentially. One interviewee said

I don’t understand all you’ve written but it certainly is interesting

Participant feedback during a phonecall, July 2007

At the learning history workshop, of the 25 worksheets that were filled in immediately after reading, only one directly mentioned a theory section as being of interest. I started to build a sense of the theory sections being ‘showpieces’ – lending legitimacy – or worse academic superiority - but nothing more to the piece. But this was too rapid a conclusion to reach.

First of all, some people *did* really engage with the theory – and as the histories were built to appeal on multiple levels and in different ways, this was valuable.

With the Southampton learning history one interviewee was very interested in the theories that were featured there and in particular Fletcher’s ideas about postheroic leadership. I had posited the view that the team at Southampton were an exemplar of distributed and effective leadership and reflected on the lack of ego in the project. We explored this further in a detailed e-mail exchange.

And in one B&NES workshop, when I had sat participants down to read the Southampton history they had balked at its length. But then, whilst reading through one participant exclaimed, “*This is good stuff!*” He had read the short piece on decision theory and bounded rationality (p31). This wasn’t just a glib remark. Over and over again throughout the subsequent session he deployed the theory, facetiously perhaps, to self-question the points he was making. “*Well of course I would say that wouldn’t I because I’m bounded rationally....*”.

Second, though people didn’t mention the theory, there was still the possibility it was enriching the reading experience. For example the social construction of district energy was an accessible and important point to make with Southampton (p.34). One reader at B&NES described, after reading, how he’d experienced resistance to district heating in his former position in a London local authority and how he’d been instrumental in changing the negative pictures in people’s minds of district energy as pipes running overland in Russia throwing steam into the cold air. “*Yes yes!*” – I wanted to say, “*that’s exactly what it says in the history – have you read that bit about SCOT?*” This often happened – people retold stories that might have been stimulated by the histories but they didn’t connect them directly to what they had read. I started to see this as data rather than an illustration of shoddy reading! If somehow the theories were being recognized and reported back in people’s own words then surely this was a point of validity?



Purpose of theory in learning histories

It seems that theory does have a place in learning history. It widens the appeal and can sometimes stimulate rich conversations directly or indirectly. It serves to legitimise the history as a piece of academic work. Care needs to be taken with this as this can, unintentionally, result in a power move, distancing the history from the reader. Academically, as a means of grounding theory in practical examples, it is valuable. By articulating the links I could deepen my sense of the theories used.

Theories from learning histories

As well as making links to existing theory, a theory was also coming out from the learning histories as Chapter 11 has described. My work with B&NES was one example where I worked with that bottom-up theory to check its value for participants. There I presented the meta-themes as an aide to gently stimulate collective organizational reflection. The meta-themes, brought to life by stories and perhaps made relevant by the learning questions, were then discussed as they applied in B&NES. When we discussed 'Risk' for example they recognised the analysis and could unpack where it was they were handling risk well or not. The conversation quickly became very honest and open as to the organization's relationship with risk. Here then, perhaps, was another way of opening up communicative space? The themes have been induced from the field and therefore have a resonant legitimacy. They relate to capability rather than blockages. As such they provide a consistent and safe base for honest and relevant inquiry. Had there been scope to continue it, more work with the themes could have been interesting. I felt this kind of work helped the group to develop a more subtle awareness of their own capacity to innovate.

An interesting third action cycle might have taken the evolved collaborative meta-themes from the work with B&NES and brought it to another authority so that the learning and validity might accumulate from one place to the next. However as with other aspects of this work, the tension comes from the time that will take. Deriving themes is a time-consuming task and the good conversations that might result from it are rarely sufficient to justify the investment. However if the resultant theory is also fed back into the academy then perhaps the argument for this valuable work might be strengthened.



Theory from learning histories

Working with thematic data from learning histories in an institutional setting has great potential as a way of opening communicative space in terms relevant and consistent to the field of inquiry. However the effort involved in generating thematic data of this kind is high and to justify it, its more general value needs to be appreciated either in terms of supporting longer-term learning across the field or in terms of building academic theory.

model is complex and nuanced and becomes ever more so as he responds to critiques. To the critique of over-functionalism he draws in a huge chunk of social theory to prove a structuralist position following Giddens. I agree wholeheartedly!

To shortcomings in his description of sociotechnical landscape he draws in a new typology³² to show that events there are not always slow and gradual. His distinction between regular events, shock events, disruptive events and finally avalanche events seems timely. In a time of freak events like hurricane Katrina and credit crunch the words 'meltdown' and 'unprecedented' are part of our daily vernacular. This constant elaboration of the model is seductive. And I notice how his model, the very shape of it, is now inescapably imprinted on my mind. I think of decarbonisation and there's this model of his with its arrows and darts. It appears as a large black anvil on which change is to be hammered. Maybe this is the angle of theory for me now. Embracing this black anvil, but casting it away too.....escaping it.

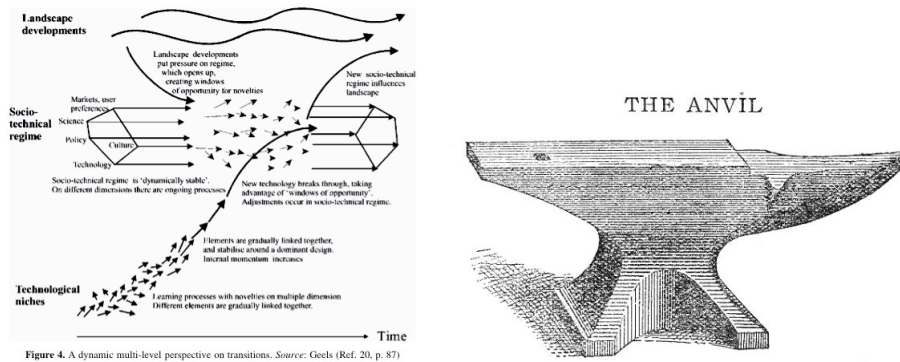


Figure 53 Geels' multilevel model imprints itself as an anvil in my mind

Embracing the black anvil

In this section I will reflect appreciatively on sociotechnical theory and in particular the Geels' transition model. I will draw in the learning from the research and the cycle of 'theory in practice' and relate it to his work. As importantly I will explain why I think it is that Geels' model has become so central to my thinking and to that of other researchers. I will highlight further research avenues.

The inter-related 'big issues' of our time (climate change, loss of species, global inequity... the list goes unbearably on) call for a large-scale and mindful transition to

³² Page 403 in Geels & Schot 2007 drawing on Suarez and Oliva (2005)

sustainability. Geels' work on characterizing the dynamic processes of such a transition – at a systems level - has been seminal in drawing together thinking from many different strands of theory. And he has done this in an accessible and understandable way. In the 2004 book: "System Innovation and the transition to sustainability", Geels' surveys the many literature streams from which he has drawn. He concludes that though:

Different literatures have interesting things to say about systems innovation,
 ...these are still too much in bits and pieces, which do not add up

(Geels 2004b p.31)

My experience of theory in practice confirms this. Bits and pieces have applied here and there but few give a sense of how a full-scale societal transition might take place.



Figure 54: The literature streams Geels draws on to create an integrated model.

I sketch out the literature that Geels' survey has identified as foundational to system innovation theory (see above). In doing so I note how similar it is to my earlier sketches of the theoretical territory. Many of the theory streams he mentions I had visited in my earlier literature survey. I shaded them on my sketch. Little wonder then that when I arrived at a set of ideas that brought everything together I felt a sense of relief. In Geels'

visualization of his multi-level model of sociotechnical transition was a map that covered the expanse of the territory. It stood out from the other theories as being all encompassing. Geels' multi-level model does not however stand in isolation. It is one compelling representation of a recent and largely Dutch school of thinking on systems innovation for environmentally informed change. It visualizes a framework of sociotechnical thinking that had been evolving over the past decade to integrate perspectives from economics, from sociology and from technology studies ((Rip and Kemp 1998; Raven and Verbong 2004a; Smith, Stirling et al. 2005)). Geels' model is integrative over time and over different systemic levels. To do this he brings together ideas that are amenable to each other but have largely been developed separately. It really represents a good synthesis of a lot of good thinking. And as my story of the black anvil shows, his later writing shows him integrating further and expanding the territory and the explanatory power of this model. I think this integrative quality together with its direct consideration of this burning question of how a sociotechnical transition to sustainability might happen is one reason why the sociotechnical framework of ideas is so appealing.

But for what is won in integration something is lost in differentiation. And Geels is quick to admit this. The model's strength lies particularly in its ability to explain things at the systems level – it proposes how regimes interlock and how different factors can link together and reinforce each other so that transitions to new regimes occur. This 'outside in' approach needs to be complemented with:

[An] actor-oriented approach working from the 'inside out'. Such an approach would look at how actors try to navigate transitions, how they develop visions and adapt them through searching and learning.

(Geels 2004b p.43)

It is responding to this call that I would place the theory I have been developing. Geels and Schot draw on Giddens' theory of structuration, as introduced in Chapter 4, to place the actor within the multi-level model (Giddens 1984; Geels and Schot 2007). Such actors, though they are not the rational automata implied by much of economic theory, are nonetheless faceless and their agency is theoretical. The learning histories introduce the human faces of some of the actors involved in projects of transition. Through the stories we can follow their vision and their processes of searching and learning. Theme

building has drawn out some actor-centric qualities that characterize these projects. The resulting analysis communicates then about agency in a practical rather than in a theoretical way. And what results is indeed largely complementary to Geels' perspective. My 'inside out' analysis suggests that, far from being strategically or policy driven, breakthrough projects erupt dynamically when contextual factors interact favourably with capable coalitions. This fits well with the 'outside in' conceptualization of transition as an evolutionary process of variation, selection and adoption rather than as a controlled, strategic process.

However my 'inside out' analysis also refutes some of the sharper edges of Geels' idealized model. The first edge it refutes is the distinction between niche, regime and landscape. Breakthrough projects in this research are realized by capable coalitions who exhibit complex qualities that include: actors' attitudes to risk, the flow of knowledge and trust; the ability to build capacity against shifting agendas and the ability to self-motivate and draw reward from the system in novel ways. Such an analysis suggests that breakthrough projects do not sit in the niche incubating until they are ready. On the contrary they often succeed because of the actors' agility in moving between levels. In the histories the narrative action sees protagonists moving back and forth between niche, regime and landscape in a series of well-timed but not often controllable events. And in the analysis the thematic insights relate across niche, regime and landscape in a similar fashion. So we might re-draw the model to show more movement between levels. Or we might collapse them altogether.

A second edge to be questioned in the model is the place of technology in it. The roots of system innovation theory and of Geels' model are, as the literature sketch shows, technology-centric. My earlier literature survey points to how I found sociotechnical theory that reaches beyond the purely socially constructed view to include elements of materialism very helpful and relevant to the research. However despite being built on ideas of the 'seamless' web (Hughes 1986) between the social and the technical the two are not interwoven but polarized by the language of the model. And my experience in the field has revealed that there too the sociological and the technical is often polarized. In the last chapter I described how I needed to actively work at expanding conversations at B&NES to keep the socio- and the technical- simultaneously on the table. In writing the learning histories I was similarly motivated to find a way to put relevant technical detail

together with human and contextual factors. Yet the forces to be in one conversation or the other are strong. At the learning history workshop, when asked what might enable/inhibit carbon reduction, only one person mentioned technology. How can this be squared with much of government policy in the UK and the US that sees technology as a pivotal part of the transition to a green economy? In summary then I conclude that there is a contradiction in the Geels model that is a result of the lineage of conversations that have created it. Though the definition of a sociotechnical regime puts technology on an equal footing with regimes of science, culture, policy, industry, markets and user preferences (Geels 2002) there is a tendency in the language and the definitions to emphasise technology. The word 'niche' has long been associated with technology. New technologies are carried as though sitting in sedan chairs into the regime by 'small networks of dedicated actors, often outsiders or fringe actors' (Geels and Schot 2007 p.400). Such a view emphasizes emerging new technologies at the expense of looking at emerging new configurations of science, culture, policy, users, industry and yes, technology. It is true the latter is a bit more of a mouthful but in practice it is more in keeping with the complex configurations that lead to transition. Such configurations blur the boundaries between the niche and the regime and between the social and the technical. The model might best be re-drawn and/or re-languaged to impart its message more consistently. The niche level might be removed or made to look more similar to the 'meso' level. The sociotechnical word might be altered. Improvements might be made to get the message more congruent.

Finally the third edge or boundary of Geels that my work calls into question is its landscape boundary. The model's exclusion of the natural world was noted earlier in the theory chapter. I concluded with the observation that perhaps this was a fair representation of our 'eco-blind' world. And I posed the chilling question as to whether as a species we are now evolving blindly and more in step with our constructions than with the natural world of which we are a part? What the analysis has shown however, and this reassures me, was that many of the actors involved in breakthrough projects were driven by visions of alternative landscapes that met society's needs in more equitable and sustainable ways. Such landscapes had within them the natural world as well. Far from blindness, it was the visibility of the natural world that compelled many of the actors to face risks and maintain tenacity in the face of challenging forces of inertia. So the 'real' landscape of Geels might be redrawn as less fixed or placed in relation to the

'imaginal' landscapes that drive many of our protagonists forward who draw their actions as much from an imagined future context as they do from the present. These imaginal landscapes are not unified. They are personal, yet collective and were to be found in quiet moments of interview as well as in reader responses to the histories. Only today as I write I have received an e-mail from a sustainability officer who has read Kirklees and finds great relevance in it for what he is trying to do in his local authority. He writes of the history:

I also liked the comment about the willingness of other projects to throw open their doors - I think that most of us realise that saving the planet cannot be done by a single community, local authority, or indeed nation. Nevertheless, this is such an exciting time and one feels that genuinely things are now beyond the point of no return nationally and internationally. The Climate Change Act was of course extremely good news. What is important is getting ordinary people engaged in the agenda of feeling that it is relevant to them, their families and their heirs.

A recent local authority reader of Kirklees.

Here I see him writing of a different landscape – trying to evoke it and inspired by the idea of it.

So Geels' model of system innovation is idealized. Naturally boundaries and definitions will fall down in the face of real life stories. From the research work I have done I have discussed some changes that might help the model to be better and more clearly developed. When I embrace the thinking this is where it leads me. Like Geels, Schot and others I extend the reach and the definitional scope. However this seems to me to miss a point. The three boundaries and edges I have discussed above suggest to me that at a certain point a model like this needs to be screwed up in a ball and tossed aside awhile. It has served its purpose. It introduces new thought patterns and a way of talking about change at the level of system that has hitherto not existed. Not unlike Wittgenstein's ladder it has moved me on in my thinking – from the familiar to the unfamiliar – and when I have climbed up I think sometimes I need to get rid of the ladder.

Escaping the black anvil

The previous section has embraced the ideas of system innovation and sociotechnical change as exemplified by Geels' model. It has explained the appeal of these ideas and suggested ways in which they might be developed further and made 'even better'. In this section I will look at this widespread appeal of these ideas and question it, suggesting that at certain points there is a need to switch away from it and not let it inform everything.

I think the image of the black anvil came to my mind as a symbol of the hegemony I was starting to detect around this emerging sociotechnical literature. The practicality and intellectual rigor of these ideas has won the widespread attention of policy-makers and researchers alike in the past decade. A new language of 'regime', 'transition', 'niche' and 'landscape' has evolved. Increasingly research effort is exploring how these new words and ideas might not only explain past transitions but also inform how a future, more purposeful transition might be governed (Smith, Stirling et al. 2005) or how transition pathways to a low carbon economy might be created (Foxon, Hammond et al. 2008). At the policy level, the 'transition approach' termed also as 'strategic niche management' attempts to draw on the sociotechnical view to refocus policy away from directive policy instruments towards more deliberative, facilitative styles of policy making (Rotmans, Kemp et al. 2001). However results have been mixed. In 2001 the Dutch Government set out a national plan to restructure its production and consumption systems over a generation using a 'transitions approach'. Success however was limited. Procedures to re-structure the energy domain were not institutionalized and researchers concluded that *"ecological modernization remains elusive"* (Smith and Kern 2007). The quest for how 'transition management' might be done goes on. Yet the theme of chance so evident in the learning histories calls into question whether it might ever be found.

When I bring stories from the learning histories into Geels, I can get them to fit in by suggesting they are the 'inside out' view as I did in the last section. But it feels like I am hammering them on the anvil to make them fit. There is another step back I need to take to reclaim the value of these narratives. This is a mode switch not unlike that suggested in learning history and discussed earlier when the researcher is asked to mindfully switch orientations from the pragmatic, to the research and to the mythic orientations.

Here I am suggesting that whereas it might fit the research orientation to remain within the Geels' model, a mode switch into the mythic orientation complements by putting the model firmly and respectfully to one side.

In my search for ways to bring about a shift to a more sustainable society, the kind of action research I have been doing shares the aims of 'transition management' as well as its conceptualisation of change as an evolutionary, experimental process. However my work is not future-oriented. It is not seeking a way to purposefully 'manage a transition to a desired point (a decarbonised economy, a low carbon future etc)'. Instead it is present-oriented and presuming some kind of transition is underway. It is seeking a way to 'ride this ongoing unknowable transition' in an elegant way. This implies a switch in orientation from theory to practice, from objective policy-making to participative learning and, lastly, crucially from the analytical to the mythic. This switch marks a return to stories and themes and vignettes of practice that rehumanise and colour the world of system innovation that is clearly, and intellectually delineated by Geels and other writers in this school of thought. When I mode switch from this black anvil of ideas into practice and learning I also find myself back on relational territory – 're-appearing' the complex intentions, conversations, and relationships between humans that have made a difference. This is the territory of postheroic leadership – an idea I have carried along with me during the research as shorthand for all that might be forgotten – and the idea of the posthero(ine) is one that has direct meaning for me, as I will discuss in the next chapter.

Summary: theory in theory

I have related the work I have done to sociotechnical theory in general and to Geels' multi-level model in particular. On the one hand the data and stories I have gathered are suggested as a complementary colouring in of this theory which necessarily is idealized and somewhat abstract. On the other hand, I have suggested that the data and stories I have gathered do not colour things in but rather they represent an entirely different picture of change within a set of imaginal landscapes. This picture works to expand conversations beyond the polarities of the socio- and the technical. It sees change as less purposeful and rooted in practice, narrative and learning. Such a picture is a

necessary complement and balance to a set of ideas that might otherwise fall victim to their own powers of seduction. Were this to happen, like the regimes it describes, such theory might guide future decisions and actions with an overly theoretical and technological bias.



A reflective pause....

So there. That's my theoretical contribution. Is that helpful? Is it the start of something or just a loud clap in an empty room? This writing has had its thrilling moments when a sentence has unreeled itself logically and appeared. But I have watched myself warily, aware all the time of the valiant attempt in action research to take theory OUT of its ivory tower and to increase its relevance. I have written this piece to build bridges between research disciplines, to address scope and to be counter-intuitively experimental by being conventional. So it is for the academy, 'for them' in the first instance. And is it for me? Maybe. There is a feel of ego in writing like this. I can't quite place it but it is there. I am fully in my logical mind when I write and there is something liberating and freeing about being able to say something, having earned that right. But away from my head what pleases me more about this piece is its place in part of this overall story. I've set out to be inclusive, to explore scope and to expand conversations. This piece feels congruent with that and so I become less worried about whether or not it achieves what it sets out to do. I reflect then that elegance and form seem more important to me than function. I think maybe if I can work with this elegance I can trust whatever function might unwind from it.

14. Questions about the Postheroine

Learning for Me

A Resonant Question

In the course of doing this research our eco-sociotechnical system has more palpably deteriorated. The icecaps have melted at a faster rate than expected. In the UK carbon emissions reduction targets have been increased from 60% by 2050 to 80%. From climate scientists we hear there is an increased urgency to act if the most severe effects of climate change are to be avoided. And in the light of recent more extreme climatic events³³ the public discourse seems to be shifting now from how we might mitigate climate change towards how we might adapt to it. Nevertheless loss of species, loss of vital rainforest and loss of biodiversity continues unfettered. And with the credit crunch, the economy which is built on the principle of digging things out of the earth, making things people don't really need, shipping them vast distances and then throwing them back into the earth

The news today, 15th February 2009

Darwin's 200th birthday anniversary is being celebrated.

Rumours that Lloyds Bank will be nationalised as banking crisis continues and economic recession deepens

Respected IPCC scientist warns that in the light of new emissions figures from 2000-2007, climate change will happen more rapidly and with more disastrous effects than previously thought.

A scientist from the institute for the advancement of science estimates 100 million earth-like planets capable of sustaining life might exist.

Jade Goody, a celebrity made famous by Big Brother and diagnosed with terminal cancer prepares to wed and die in the public eye

³³ e.g. The European heat waves in 2005. The UK floods of 2007

has started to falter but dependent on it now, we rush to resuscitate it, as yet not knowing how it might be reinvented in a more sane way. How might we, as a society, as a human race, have the equanimity to innovate in times like this? This is a big question but in it lies a small but deeply-felt personal question:

How can I act with equanimity and meaning in the light of all this??

In many ways the research described in this thesis has been an attempt to articulate a personal response to that question. As I explained in Chapter 4 I see my inquiry as bi-directional. I have been working to tune my personal inquiry practice to my public work in the world. In this chapter I will reflect on how this has been for me and what I have learnt from it.

I want to emphasise that though the reflections in this chapter are personal, they still relate largely to finding a ‘work’ response rather than a purely personal response to acting with equanimity in these times. This reflects my ongoing attempt to work into my experience rather than out from it. What I do not describe is an inner layer of thinking and experience in relation to climate change. This privatized layer ranges from innate survivalist emotions (‘we must escape and build a passive house and become self-sufficient’) to thinking around how I might live and what choices I make to try to act more sustainably. I hesitate at the full privatization because I also want to create in this thesis a feeling of the history and mood of this time. So in view of that hesitation I will introduce first a more lived response to that resonant question of how I do live and work with the issue of climate change. This is a piece of reflection I wrote a year ago now, in Feb 2008, a day after the Lowcarbonworks team had met to discuss the different theories that related to our work.

A Lived Response



February 9th, 2008

Living and Working with Climate Change

I wake at 6 – my son Alex (who is 6) has had a bad dream and wants to climb in beside me again – I like cuddling him in these dusky moments between sleep and waking. His touch is gentle now – he doesn't kick anymore. He lies carefully not wanting to be a nuisance – just wanting comfort and security. In those moments I know I can give this to him – the mere fact that I'm there makes him feel safe.

My head is throbbing, fuzzy – a thought hangover. My stomach feels tense – there's exhaustion coming out through my arms. What is it? I remember our long project theory meeting yesterday. And hazily between sleep and light I try to understand the mood, the cloud that's arrived now – scudding across the blue-sky focus of the earlier weeks.

My mind scrolls back across the project theory day we had yesterday. It'd started off happily enough with communities of practice. The discussion was already stimulating and connected to a question that's been very alive for me recently: "does tackling climate change require a new way of working?" Increasingly I think yes - right down to the core of how we do things. Energy up, brain active. Then Michelle started to edge us toward bigger questions with a thoughtful presentation on the social construction of climate change. The theory she brought in highlighted the difficulty in reconciling in particular the local 'indigenous' view with the 'global gaze' of the disconnected macro political view. I liked here particularly the chat about science and scientists – Susan, or was it David talked of how they are necessarily sensually connected with the world but that the scientific discourse excludes that connection. This reminded me of what John Horgan found in his book the "End of Science" where many scientists privately held deeply spiritual views but did not wish to discuss them. David mentioned his own indigenous knowledge – when he's rowing he can tell the wind has changed. And I thought too of my own noticing of the seasons and the changes and how increasingly that has embedded the reality of climate change in my psyche. A warm day in February is no longer a happy source of glee.

Lying here now, a dark little giggle erupts as I recall the afternoon, and I suppress it not wanting Alex to stir. A tragic-comic image flashes into my mind of the whole team standing stoically on the Titanic. The discussion had led us to a desperate point you see. Gill had presented us with this recent perspective from sociologists at Bath who propose there is now a new narrative of postecologism building up around climate

change. These guys point out that though the *discussion* is ratchetting up about climate change, the will to actually take action has effectively been squashed. Green radicalism is over. The war has been won by the middle ground and the underlying capitalist ideal of continuous economic growth remains intact. Goals are set fifty years out safe in the knowledge that they won't need to be delivered. I was absorbed listening to this. I think we all were. The room went quiet – a strange otherly mood was descending. And suddenly, right there in the meeting I had this vivid image of us all standing on the deck of the Titanic and noticing that we'd even stopped rearranging the deckchairs. In that silent moment it felt like we were all just staring at an iceberg. I was feeling emotionally low now – I was tired, there'd been conflict over the agenda and somehow all this was moving me from an intellectual space into somewhere altogether more emotional. Peter said "Oh dear, this is very depressing, shall we sing a song". I laughed semi-hysterically. Judith got up to go. As she opened the door someone said, perhaps there is nothing out there and we imagined her stepping into a void with a silent fading "aaaahhhh". Lying in bed now I laugh quietly again as I remember this shared comedic moment. A burst of black humour always warms my heart, but I recall a real human vulnerability in the room in that moment and it's with me still this morning. What can we do?

The meeting moved on quite appropriately to a discussion about adaptation. Carol presented her work with different groups in the Southwest looking at preparing for changes in the climate. This year and last year we've been shielded to a degree by El Nino she said – so apparently it is all going to kick off in 2009. Here surely we were managing the Confucian paradox – moving from the outer orbit of the discourse of all discourses right down to Tewkesbury, floods, climate change, locally and in the here and now.

David said that actually mitigation might now best be addressed via adaptation. It's not actually a dilemma. With all other species racing to the poles, might it not be better for us as a race to start adapting with our indigenous rather than our intellectual knowledge? I do admit that at times I think where can I take my family away from all this – where the safe, in out of Alex's breath can continue. I suppose this is my human survival instinct kicking in - my own expression of adaptation. David's point was (I think) that this wasn't necessarily countervailing to mitigation. And putting together all I've heard in the past month it seems we may be in that period now where mitigation ceases to drive the agenda as we grasp at adaptation – in other words we are now really 'in the thick of it'.

Well that's it – that explains the fug-head and the sad feeling in my bones this morning. I felt wrung out by the end of the day. Came home and worked late on finalising the Merton case for the workshop – adding the new inputs to the learning history with care and respect. It felt soothing to get back to the learning histories – but a cloud had gathered over what sometimes feels like beautiful work. Was I not 'tinkering around the

edges' of mitigation, kidding myself it might actually make a difference. Was it not unlike the false security I offer Alex in those pre-dawn moments when he wants to know for sure that everything will be ok.



Story end.

A Reasoned Response

Introducing the postheroine

The story hones into a particular morning and a particular mesh of theory, thoughts and emotions. I will now move to write about such issues in a more rationalized way. This starts with an introduction of the postheroine and what she represents.

At the end of Chapter 3 I reflected how my outward facing inquiry had led me into a masculine problem-oriented, sociotechnical world. I wondered what might disappear from my reportage and my practice by occupying this more technical, public world. I fleetingly introduced some of Joyce Fletcher ideas. Her writing about the paradox of postheroic leadership and her ideas about disappearing acts were symbolic of the feminine world of collaboration and relational practice that I didn't want to forget. As I went forth in my research I wore these ideas like the charm necklace I actually do wear around my neck.

And just as from time to time my hand flies up to my neck to feel

the beads on my necklace so too I would check these relational ideas from time to time



Figure 55: My relational charm necklace with beads: *love, trust, mum, inspire and dream*

knowing they represented a link out to a whole different set of questions that concerned what practices and skills are compatible with acting meaningfully in the context of our world today. The postheroine idea was one charm on this metaphoric necklace that I could feel but not really see. Postheroic leadership is a term associated with new models of leadership that have emerged in recent years as increasingly the leadership in our knowledge based environments is understood to rely:

less on the heroic actions of a few individuals at the top and more on collaborative leadership practices distributed throughout an organisation.

(Fletcher 2004 p.648)

So it is a leadership that is expressed through a distributed network of actors whose capacity to interact in relation to each other dictates the quality of how they collectively lead. I extrapolated to presume that a conceptualisation of leadership that emphasized collaboration and that rejected the notion of the single heroic prime mover would be needed if we were to move to a more sustainable world. But beyond that I was not sure of the details or the implications for practice. What did this then mean for the individual in the postheroic network? Who was the posthero, nay the postheroine? What did she do?

The notion of the postheroine took on an idealized, oracle-like quality for me that departed from the writing on postheroic leadership. My postheroine was an individual who was in relation to others but knew how to take meaningful action to address climate change. I aspired to be a postheroine as a shorthand meaning not-hero. And in reflecting on my own actions and those of the participants in the research I was trying to shape what it was to be a postheroine.

The next couple of sections will hone in and reflect on some of the strategies that I adopted in trying to be postheroic. They simultaneously start to build a picture of the postheroine whilst also deconstructing it as I describe in my reflections some of the difficulties with my strategies.

Qualities of the postheroine

She forgets herself?

My first response in choosing how to act was that I needed to forget myself. In chapter 4 I declared that this would be an outward-facing inquiry. Working from the change needed in the system, I would tune in my practice and any first-person inquiries to the challenges, which I encountered along the way. As a result the public face of my work was quite methodologically and problem focused. Here is a problem: “the lack of learning between successful projects that reduce carbon” and here is a methodology to address it: “learning history in an institutional setting”. The first-person challenges I met whilst doing this work were not of course neatly aligned to big systemic issues. They were what they were – a mix of my personality, experience and the nature of the field in which I was engaged. However according to this idea of being ‘outward-facing’ I was more likely to make inquiries of those challenges that were in some way relevant to the research. And where these referred to my personal practices I would explore them but it was more likely that I would do that in private.

So for example, in the private realm, there was a recurrent question about ‘my achiever’ and how to let her have a valued place in what I was doing without letting her dominate. This wasn’t a formal inquiry just something I thought about from time to time. It didn’t impede my work – it certainly helped me to get things done! On the other hand the challenge of my nerves about speaking in public stood to really impede the research and so it became a personal inquiry for me into the act of ‘stepping-in’. This saw me trying to coax myself into flow and improvisation more in my practice and away from my long-standing pattern of thinking and over-preparing. And in the course of the research I had plenty of opportunity to practice. This inquiry, which I shared with friends and my CARPP supervision group, enriched the way I worked. There is a whole story to it and the fact that it is omitted makes it no less important to the learning I got from it. This is the point. I learnt that however I might face myself outwards, personal questions and inquiries still occurred and had a life of their own through the work. However I tended to frame them in terms of what I was trying to achieve with the research rather than as inquiries solely contributing to my development as a person.

This framing led to a disjuncture between my outer and inner work that was brought into stark relief for me by my CARPP co-supervisee Dave, who having listened to me first describe my despair in relation to climate change and then move on to a detailed description of my learning history work in session, asked:

So when you talk about your own sense of despair, to what extent do these [learning history] interviews and the way you are writing these up, uhm, how do they interact with your own views....? Do you pick up anything hopeful from these stories?

DAVE in CARPP Supervision: 9th October 2007

Though I blustered a reply in session, it was only when I listened back to the tape and heard Dave's question that I stopped and realized that no, I picked up nothing hopeful at all from the stories. My despair about climate change felt quite immovable. Though I hoped others might be inspired by the learning histories as I momentarily often was, my big despair was privatized and untouchable. The approach of an 'outward facing' inquiry had meant it was separated off. By following the precept of forgetting myself unless there was something important impeding the research I had boxed up my feelings entirely and it was only when Dave questioned me that I realized this kind of gap was surely unhelpful. It meant I was not personally engaged at all in the practice of hope and inspiration though I expected my participants to be.

She is articulating 'different moves' in the system?

In the theory chapter I explained how I hold an evolutionary view of change. This means that change is not something I believe I can purposefully control. It is rather something I have to find a way to meaningfully be a part of. With the research, I hoped to get involved in processes of variation and selection and introduce new possibilities for how we might learn from each other and become more sustainable.

This idea of variation was important at quite a fundamental level for me. I often described what I was doing as the making of 'a different move' or 'an unusual noise' in

the system. I think this is why form was so important to me. The journalistic nature of the histories; the imposition of a long read on busy executives; the graphics and colour of the learning history workshop: these all were minor, but nonetheless, different moves – departures from how things are normally done. The form of my ‘move’ needed to be sufficiently different so as to be a variation – perhaps a mutation - on what we were used to. It was an attempt to create alternative patterns and forms of working whilst remaining distant from the idea that these alternatives might be any better than other options. And even if they seemed better I also tried to distance myself from the notion that they might be selected on their merit. If a few people danced along with me to this ‘different move’ then well and good. And if they did not? No matter. What I had done still had meaning in that it was a contribution to variation.

There was congruence between the idea of a mutative ‘different move’ and the way that learning histories were being used as a vehicle for learning. The learning histories themselves were all about inspiring fragmented and varied responses rather than simple replication. At the Eden conference³⁴ in 2007, I remember getting quite agitated when in a plenary session the discussion centred on how exemplar projects might be replicated.

³⁴ A sustainability conference at which I presented the Merton history. Mentioned in passing in Chapter 7

Uncharacteristically I grabbed the microphone and said something like:

MG: The question is not how we replicate but how we mutate – it behoves each of us to try to do something new in how we are responding to climate change and just hope something comes of it.



Figure 56: Caught speaking in a plenary session at the Eden conference 2007

I remember a few nodding faces in the crowd and perceiving many others looking at me as though I was quite mad. My 'different move' shows how committed I was to this idea that learning from what has already been done can be creative, personal and expansive. An innovation in and of itself. Talk of replication kills off that possibility and as the research went on I became quite passionate in my resistance to mechanistic images learning that included best practice, knowledge transfer and so on. Such notions robbed the learner of their creativity.

The 'different move' approach to acting and living meaningfully with climate change was often very liberating. It gave me the permission to experiment and to behave a little bizarrely (in my own terms) from time to time. And I was freed from any great expectation from these acts. But it was a harsh position to take and difficult to hold permanently. I simply could not fully detach from my 'different moves'. Dammit I wanted people to join in. I wanted to be understood. Particularly in the early days of the research, when many approaches to the system in which I hoped to locate my research

went unanswered, I continually felt like I was transmitting noise into a vacuum faithfully – speaking in an empty room. It was dispiriting and the idea that it was natural for a ‘different move’ to be met with misunderstanding was insufficient to get me through moments of despondency and disappointment. Later when my work started to get a hearing I noticed how these different moves required energy to sustain them. Eventually the impact of the work petered out and I was left reflecting had it been worth it? What difference had it made?

So the idea of the ‘different move’ was my way of describing a contribution of practice to an evolutionary ferment. It built on what was done already, but it was different and the trick was to get that sameness and difference in tension with each other.

She learns and connects with other innovators?

As the research proceeded and I became enmeshed in the learning histories I was studying I increasingly thought of my own work in terms of an innovation journey. This thinking linked strongly to my thoughts on evolutionary change and the previous point that learning (or variation/mutation) from others is itself a creative act albeit one that is seldom rewarded.

In keeping with my views, elements of the innovation journeys described in the learning histories rubbed off on me in curious ways. Phrases and snapshot scenes from the histories were stuck in my head. ‘Creating a buzz’ from Merton came to represent building momentum behind an idea as I did for the learning history workshop. Also in Merton, ‘Friday afternoon calls’ represented an end of week opportunity for more spacious conversation and twice or three times I too had significant Friday afternoon calls that helped me make progress with the work. In Kirklees the visual image of being on a boulder tumbling inexorably down a hill and ‘being on for the ride or not’ (Jimm Reed’s words) often comforted me when I found myself off the fence and on for the ride of a presentation, the workshop, indeed this whole PhD journey. And from Barnsley the famous phrase “It’s a no-brainer” became part of my vernacular and a route to playful but challenging conversations as to why most things involving climate change seemed to be “a brainer”. Scenes too played on my mind. When I was in a private situation where I might have an opportunity to network, a picture of Adrian at the vets in Merton would

flash into my mind. I would notice how in my private sphere, I didn't always have the energy to take conversations that were sometimes full of opportunity to a place that might be helpful for my work. In this case a scene from the learning history was aiding me to inquire into my own capacity to innovate and sustain energy.

Being open to being informed by what others had done before me seemed a meaningful thing to do despite the fact that I was somewhat blind as to where such learning might lead me. It became formulated for me as an essential aspect of being a postheroine. The effect of this learning was much more subtle than acquiring information. By finding participants' words coming to my lips I gained a sense of connection with them and their stories. Though my actions were singular and identifiably mine, I was not acting alone but acting with others. This felt rewarding and it echoed Thurstan's and Jane's separate responses to learning history work as reported in earlier chapters when they described feeling 'part of something' and more emboldened as a result. This sense of connection was vital for me but it sometimes felt vicarious and lopsided. Connected as I was to the participants and their stories, it did not feel as though they were connected to me. The postheroine must find a way to accept her smallness, as the next section will describe.

She gives without expectation?

The 'big issue' was so huge that my approach was to try to work with it as purely as I could with no expectation of ever actually seeing the difference I was making. So my 'different moves' implied an act of faithful giving. The depth of minute preparation for the workshop and my attention to its form was out of proportion to any perceived outcome. It was practical and detailed work. Similarly the website. The act of 'really listening' to people and reflecting back their stories in a detailed learning history was, to a degree, eccentric even in the world of research where often conclusions are drawn across a much bigger dataset. Participant's surprise was akin to a person receiving a present and I sometimes thought of the work I was doing in terms of sacrifice and service. When I thought in these terms then I found myself comfortable and accepting of the work I was doing. The next excerpt from a CARPP supervision session illustrates this:

MG: The thing is, when I'm in action and I'm engaged in the field with people, listening to them, I just feel like 'it's the work'. It's not me, it's just

the work and it's so worthwhile and I can really stand up for that. And I can really say that it is worthwhile to sit down with people like John³⁵ and if nothing else happens, ...if none of the rest of it happens...he said, he sent me back his feedback and said "I've given you a garbled account and you've given it back to me in a coherent form and that has helped me" – and if nothing else happens that is great. I have no hesitation in that, but the hesitation comes in if I catch myself being ambitious.

Me talking in a CARPP Supervision session, Jan 2008

The tension between grand ambitions and sacrifice was palpable for me. My whole way of working was built on an edifice of the non-ego. My position led me at times to be so pre-occupied with avoiding my 'ego' that I could speak of little else! The 'different move', the 'forget myself' aspects of my postheroine together with her sense of sacrifice was making a martyr out of her. Another disjuncture had appeared.

It was in my CARPP supervision that my colleagues gently encouraged me to explore this and to take more ownership for my ambitions. In the same January session, Geoff urged me to be grandiose, for a moment at least:

Geoff: I used the word grandiose because you were shying away from it, and possibly rightly so, but there is some element of this [your work] that is brave and bold and beautiful and big.

MG: Yea – I mean I'd love if the guy who runs the Beacon scheme said – this³⁶ is great let's use this – but guess who's tied up with that – it's my ego. So I have to divorce my ego from attaching myself from something that did

³⁵ Name changed

³⁶ The learning history approach is what I am referring to here. There had been interest in possibly taking the approach into the government agency for learning in local authority

become successful. But increasingly I do feel there is merit in this way of working as and of itself, *me aside* if you like.

Conversing in the same CARPP Supervision session, Jan 2008

When I read this now, particularly the words '*me aside*', I see myself caught in the narrative of my own 'ego-lessness' – my martyrdom - and not giving the work the due attention it deserved. In truth I longed to luxuriate in the ambitions for widespread change and learning that might be realized through this work. I wanted to entertain them, but was afraid that if I did it would have been purely ego and grandiosity. Yet that might have been a more generative narrative to entertain, once I didn't take it too seriously.

This linked resonantly to the theme of 'reward and recognition' that came up across the learning histories. Reward and recognition was important to me, just like it was to the participants to whom I spoke. At the workshop, in a casual evening conversation, one participant described his struggles when a sustainability initiative that had originally been his idea was taken up in his council but was widely attributed to someone else: "I should just be happy it went through", he remarked, "but somehow it irked me that I didn't get credit for the idea". Several others including myself recognised this uncomfortable clash between what we then interpreted as our ego and the greater good. Now I am not so sure it is helpful to frame it as ego. Might it not also be described as the desire for creative expression? The challenge for the postheroine is retaining ambitions and garnering individual rewards whilst acknowledging these cannot be hers alone.

Reflective interlude

Reflecting on this first articulation of the postheroine I notice how she does express the many of the relational skills of the feminine: she listens well, she empathises, she connects to others, she learns with others and she is self-sacrificing and serves, she is opportunistic. Yet, from the challenges I mentioned as I was writing I recognize some traits in my postheroine that were difficult and counterproductive. She keeps some of her relevant views separate, she tends toward martyrdom, she doesn't stand up for her ambitions, and she can be gloomy and depressive. She clutches her despair to herself like a comfort blanket.

If I think about the participants I met and admired who were actually 'doing something about climate change' I could reel off a set of attributes: they were passionate; they worked with others; some had huge egos; some expressed quiet desperation; many expressed resolute conviction; they all enjoyed recognition; all were opportunistic; they were outspoken; all were tenacious; some were magnificently bizarre. Some of these qualities might be termed postheroic, but others are most definitely not. But what they all shared was 'they did something' – they made a different move. They took action from the centre of their beings and it was meaningful. And their sentences started with 'I'. I start to wonder then if this whole notion of the postheroine is creating a disempowering tension between the masculine and the feminine. In an attempt to articulate how we might lead ourselves out of a situation is there not an assumption that leadership whatever it might be, is worth waiting for, and significantly it is done by others. It moves the question: "what might I do?" to the passively voiced: "how might leadership be well done?" Whether heroic or postheroic it is a conceptualisation that suggests waiting and looking rather than doing and seeing. Somewhere there is postheroic leadership that will know what to do. Is there time to figure out what it is?

As ever, at just the right moment, I find a writer who puts my germinating thoughts into words for me. Having explored the idea of postheroic leadership as it might have been expressed by a leaderless group of quilters who produce patchwork quilts collaboratively in a timely and successful fashion, Ann Rippin concluded by suggesting there had in fact been no leadership at all. Though she acknowledged that distributed leadership might have been there but hard to detect "*like gold beaten to a wafer thinness*" (p.214), she went on to suggest it was more likely that the concept of leadership is an unhelpful preoccupation that inhibits individual responsibility:

My own position is to highlight the dependency implied in this depressive fetishisation of leadership, seeing leadership as a messianic function that will save us from certain decline and to take responsibility for our own actions

(Rippin 2007 p.220)

I think I agree.

Beyond the postheroine

Learning for me

Past the hero then is the postheroine and beyond that is just a person doing her best. The fact that, in terms of the big issue, there is no happy ending is surely not a surprise. In the past three years, carbon emissions have continued to rise, more species have been lost and the economy has started to unravel. The learning I have been drawing is simply about how to go on acting and working with meaning in such a landscape. Following on from my attempt to describe myself as postheroic I will draw some learnings from this cycle of reflection. The learnings below show how my understanding of what it is to act meaningfully has been shifting as a result of these reflections.



Seek out moments of reward

I take more time now to savour or even seek out moments of success. I don't move relentlessly on. After my final session with B&NES I let myself enthuse about it with a friend knowing that this is a small act of celebration of what has occurred.



Enjoy moments of hot-blooded hope

I am trying to unfasten my clutch on despair a bit more by embracing a more unknowing stance about the future. When I watch Barack Obama being sworn in, part of me knows one hero cannot save the whole world, but I let myself enjoy a moment of hot-blooded hope nonetheless.



From self-sacrifice to abundance

I try to frame my practice of giving without expectation a little differently. I try to move from seeing it as a form of service and sacrifice to a form of participation in an abundant world. This feels less isolated. I notice the abundance of others and participate with them in this rather than thinking of it as 'giving back'. When I read Ann Rippin's quilting paper I write and thank her. Julian, who so generously gave his time to help me create the 'mythic deprivation' picture that I showed at the end of Chapter 9, says he wants to explore how to link action research with graphic visualisation and climate change. I make time for this. It is a rich and interesting thread that is just opening up.



Entertain grandiosity

Now I let myself entertain 'big plans' and 'grand ambitions' from time to time. With colleagues we are trying to strategise about how we might continue work based on learning history; I sometimes try to think very big. I catch myself in the martyr non-ego narrative more and am beginning to see when it is unhelpful.



Seek moments of pointless elegance

The beauty of a moment in and of itself, whether it is in nature, in my work or with my family and friends has become increasingly more important to me. I say pointless only to prevent these moments from being hijacked into belonging to some greater plan. So they can have meaning in their own right and irrespective of what happens next. A bird chirping in my local woodland transformed by snow; Sitting with Welsh children hearing their stories about food and noticing how easy they are in narrative and knowing that this moment relates in a circuitous way to the learning history work I've done; Or after months of acrimonious practice hearing my children play their piano duet right through and witnessing them hug each other at the end. These are all moments of pointless elegance that stand alone and have meaning.

All these learnings are to do with changing my personal narrative of who I am in relation to the world I am in. This narrative does not change overnight. But it offers a variation on some of the more fixed and stuck narratives I have been carrying and no doubt this variation will continue. From despair, I move more quickly to unknowing. From trying to work out and identify 'moments of transformation' at the start of this thesis, I have moved to balance this with an honouring of and search for 'moments of pointless elegance' and a tuning of my practice to recognise this. There is a further move then away from ends to means and a search for beauty in action. At its extreme the action must carry a pointlessness. Ann Rippin illustrates this with her story of collaborative quilt making where some women simply throw away the quilt once it has been produced. And perhaps this is what I have also been doing with this learning history work. Creating something beautiful to be thrown away. The pointlessness embraces the abundant and the unknowing and so allows for at least a little sneak of colour to lighten up an otherwise grey and gloomy scene.

*"From Butterfly wings to the hurricane
It's the small things that make great change
The question towards the end of the lease is
no longer the origin but the end of species"*

Lemn Sissay³⁷, Poem

³⁷ Broadcast on 9th Feb 2009 on Channel 4 as part of the Darwin 200th birthday short films.

Endings

Picking Fruit

Late January 2009. As I write this there is a mood of freshness come too early in my work life. New projects are in the air; new possible futures are being discussed. With this mood comes a tenuous but nonetheless palpable shift in the place this PhD occupies in my life. I find now that, for moments at a time, I can glimpse past its magnificent bulk to a time when it will be over. It is a dizzying thought: to be finished. I catch myself rehearsing moments of the future, concocting potent feelings of tearful relief and nostalgia; triumph and rootless loss. This early spring is not quite here but it is in the air.

The Lowcarbonworks project is coming to an end in July 2009. As a project we are preparing papers that might be published. One abstract I have written describes the analytical part of the work described in this thesis. I find myself writing quickly now. I rattle off in my abstract:

The analysis suggests that, far from being strategically or policy driven, innovative projects erupt dynamically when contextual factors meet capable coalitions that exhibit certain complex qualities, that include: actors' attitudes to risk, the flow of knowledge and trust and the ability to build capacity against shifting agendas.

E-mail to Peter, January 2009

Peter comments that he likes the sentence and when I look at it closely I can see in it my literature survey, the learning history interviews and the subsequent detailed analysis. So about three years of work then. No wonder I have something to say. Perhaps statements like this are the fruit of that garden I described at the start of the thesis. I can pick them off the branches now and just let them stand alone, knowing that behind them lies an edifice of painstaking research! This seems a good way to bring the thesis to a close. In a reflective mood, I recognise there is a harvest and am grateful for it.

Reflections on this Presentational Form

On March 1st, 2009 I print out the whole thesis for the first time. The printer spews it out in the empty research room office that is stiflingly hot with a weak winter sun. I clip and staple and suddenly in an unexpected moment there it is. I flick through looking not at the words, but at the impact, the aesthetic of it. I like the font and the variation on the page. Plenty of pictures and mixed snippets – a bit like a scrapbook. It looks a little like a learning history and this was what I wanted. But this is just how it looks. When does that attractive kaleidoscopic quality spill over into being plain confusing? This is the tension with which I have had to work. It has been difficult to stick to my original ideas on presentation where I was motivated by ideas of congruence and elegance. Whereas congruence led me toward jagged switches between differently toned fragments in the writing, the advice, particularly from supervisors Peter and Geoff was that this was not elegant and that it was difficult for the reader. So I softened the switches, and removed some of my longer storied fragments. Then another reader, Jean, a fellow PhD researcher, said she loved those long stories. She lamented the loss of some from an earlier draft. Maybe I reached an in-between place that was neither brave enough to really make place for narrative nor decisive enough to exclude it altogether by working a more consistent tone through my main text. Or maybe, just like with any learning history, it depends on the reader. What is pleasing to some can be irritating to others.

So ironically when all is said and done I have found it difficult myself to keep faith with story. I have struggled to keep space for those expansive, fragments of experience in a dissertation like this where coming to the point and then making it is really what a PhD thesis is traditionally all about. The storied fragments, the digital story: these all delay this. Peter says he finds they are sometimes like a tease. They prolong the agony of waiting to find out just what it is I am saying. And yet I like them. I like the setting of at least some of the action in time and some of the characterisation. When I see this I know I am saying things in a different way – a richer, layered way. My different move is that I did not come to the clean point and that, in a way is the point. I imagine an unknown reader, someone like me, in the library who hauls out this thesis and is for a moment assured and encouraged by its messy humanity.

Afterwords



Figure 57 What painting do we see?

I am at the end of my narrative arc. There is a dilemma with stepping back. If this has been a writerly, plural text then the meaning-making rests largely with you the reader and how you connect this to your stories. On the level of meaning there cannot be one picture and I refuse to impose one. However on the level of action and contribution in the world then a picture can be discerned. It is a picture that has materialised as a result of my narrative arc. By describing this explicitly I make another action in the world. Why shrink from what has been done or leave it to chance that these pieces might be fit together by different readers? Being postmodern has its own challenges I realise. All voices in my pluralism are not equal. Some are louder than others. The dominant sociotechnical theory strand has been quite deliberately shown to mute the theories of relational practice which hang in barely by a thread through the thesis. This I felt reflects

the field in which I worked. I liked that the actual form of my thesis expressed its own argument – namely that it is hard but essential to keep different perspectives simultaneously on the table: the socio- *and* the technical not separated but together in some way. The result of this play on form meant that relational practice represented less a theory in the thesis and became more of a symbol of all that tends to get excluded or become disappeared from the field in which I worked. And that symbolic vacuum was filled with my own stories and reflections on my practice there. In this way I was elbowing out the space to look at what is normally absent. Does this work? Well yes and no. There is a tricky tension between emphasis and invisibility. I have already shown that I cannot ever fully impose on the reader the frame in which he or she should read a writerly text. So a shaky anchoring of relational theory might seem just that to one reader: shaky. To another it might seem to be the artistic, subtle statement I intended. And to a third reader it might simply be a puzzling twist. How things are said is not equal. By not emphasising something theoretically there is no doubt a shift in visibility in the thesis. The absence of a direct statement of the importance of issues of power, gender for example in a field such as the one with which I engaged might imply these issues are not important there at all. This is an aspect of my approach which has been to start where the field is, rather than from where, at a step removed, I might observe it to be. The challenge of omission results. My response to this challenge - it arose during my viva examination - was that narratives, if honestly told, will naturally express the excluded, subtle and tacit dimensions. I stand by this but add that narratives express themes in a different way. They speak more to experience than to theory. As a result my narratives might reach out more to a readership of practitioners rather than to a readership of policymakers and academics. So this tension between the visible and invisible needs to be carefully worked with an eye to the different audiences. And keeping ones own narratives honest is just as demanding as it is for the learning historian. Without the steady questioning and explicit discussion of all that was tacit in the Lowcarbonworks project this account would not have expressed as rich a relief between the said and unsaid. So I still hold that a wide scope can be achieved with the approach I took in my writing but I recognise that the choices I made about what to emphasise explicitly and implicitly through narrative are significant in that they will shape ultimately where and how what I have written is of influence.

A friend and fellow action researcher wrote of my PhD:

As I grappled with the reading of Margaret's PhD, I found that I 'got' the point of the narrative, learning history approach more deeply than I had before – and I felt it was because the form of the writing as a learning history itself that allowed me to find my own way to relate to the ideas it embodied. I seemed to go through a change of perspective myself which felt quite profound; it touched me emotionally as well as cognitively and this felt important and exciting. I seem to have internalised a new understanding. I have become post-modern!

Jean Boulton, from a draft article she is writing in July 2009

Here the tacit form seems to have allowed Jean to achieve her own meaning-making in relation to my work rather than because of it. For meaning, and indeed for elegance, some of what I have said must still remain tacit. My hunch is that it is particularly the humanity of the piece that must be left uncommented. This lies in the folds of the story. There I describe myself, a woman, and a very fallible, idiosyncratic human who embedded herself in a particular field and tried to do some good work there. Neither hero nor post-hero. I do not want to theorise my humanity. It is the particularity of my experience that is there for others to recognise and perhaps connect to. But here in these afterwords I want to work the shape of the less visible into something more overt. For another kind of action and learning in the world a little more must be said and some of that quite explicitly. This then is a final shaping. A stepping back. A musing on the picture of this work in the world.

First theory and action research. The contribution of this work to sociotechnical theory has been articulated in the preface and expanded upon in the thesis. Through narrative I have added a human dimension to an important set of ideas about societal transition that have, to date, been limited by their theoretical conceptualisation of human agency. In the learning histories the human and relational aspect of technical change – the very particularity of these - has been re-introduced through the narrative. Like sociotechnical theory these narratives make a link between the micro- and the macro- but they do so in a way that is more flowing than the clear lines of niche, regime and landscape. The narratives describe characters that move with agility between these levels. Innovators are often regime players who, along with others, create niches and are driven by a vision

of a landscape that is both real and imagined. And this landscape is one that includes the natural world. And through narrative micro- and macro- actions and intentions start to be linked and become more apparent. The micro-moment of opportunity and chance – the particularity of that catfight or that chance cup of coffee is set against the characters' intentions and vision that were usually grand and ambitious. The reader can thus start to see how these micro-moments link to broader visions that are set and adjusted within a wider macro context of changing agendas.

What has resulted is a picture of change that is much less knowing, that is more present-oriented and more fluid and human-centric than sociotechnical theory. It is a practice view of change. I call it the practice of transition. With an evolutionary theory of change such as sociotechnical transition theory, there can be a tendency to revert to the view that a societal transition *can be managed* in some way. The narrative view adeptly prevents a collapse back to certainty and control. With this view questions of practice have more to do with how one can connect meaningfully to an ongoing transition rather than how one can manage or change something. With these observations then the whole concept of 'change' has become moot.

But neither an expanded theory of change nor a full deconstruction of the term has been my goal. And here lies the broader point of my theoretical work that has to do with the pragmatic imperative of relating theory more easily to practice.

By working with theory in the way that I did I storied my theoretical exploration as a quest. A practical quest to help address a big issue. By doing this I was in effect reversing the link from theory to practice. I was performing relevancy checks on theory and looking for it to serve the purpose of guiding practice rather than as an end in itself. When my quest arrived in sociotechnical theory I worked appreciatively with it, critiquing it and enhancing it with my own thematic work. There I showed how narratives could bring such a theory to life. But my purposes in doing this were not only to serve the theory but also to serve the question of practice in the face of the big issue. So when I worked with the analytical aspect of learning history to draw out general themes about the qualities of innovation I did so in a way that supported two onward routes. One route was, via the learning questions, back into the field of practice. The other route was, via further theorising, back into the field of theory. I took both routes. The questions I took

out to practitioners at a local government sustainability conference in Liverpool in May 2009. The theory I took to an academic conference in Amsterdam just after submitting my thesis in June 2009. There some 200 transition researchers were meeting, including, to my excitement, Frank Geels himself. This whole exercise was an attempt to increase the scope of my action research. It was an experiment. In Liverpool I was running a workshop with local government sustainability practitioners. I presented the six themes (from Chapter 11) to them and they were enthusiastic. They recognised the themes but had never seen them presented in this way. Because the themes were drawn from stories I realised that I was telling them a familiar story but in an unfamiliar way. I was conferring an academic legitimacy to human qualities of innovation that were already known by practitioners to be of value. But these qualities are rarely formally recognised. This seemed important. A month later in Amsterdam I presented my themes to an audience of transition researchers. It stood up well I felt. But there were few audience questions. My presentation felt somehow sealed into itself. The chair of the session remarked on our work overall: "it's so fascinating", he said, "I wonder do you need to relate it to transition theory at all? Why not just stick with the narratives?" There we were, having crossed the bridge entirely to a new discipline and the researchers there wanted us to just be action researchers! My overall conclusion is that my expansion of the theory had, for this experimental cycle at least, more value in the field of practice than it did to the academy. Either route would require further work to capitalise on the contribution. So as important as any theoretical expansion I might have achieved, is my attempt to work with it and to understand its practical implications. This I propose is a way of working with theory that is interesting for action research generally. In this way theory becomes another narrative. Another story. It is naturally equalised alongside the other forms of knowing described in this thesis.

Placing my methodological contribution sits more easily with the overall practice orientation of the thesis. I have already summarised the methodological contribution of learning history in an open system to the field of action research. Practice accounts, for example my reflections on power and participation in Chapter 7, strengthen and develop the methodological proposition generally. From these and my situation of the method theoretically comes this new articulation of learning history method that is being offered as a well-substantiated and theorised 'method' from which practitioners might work. However the storied and reflective form of this proposition has meant that it has already

found an outlet directly back in the field of practice. In Chapter 5 I mentioned the Appetite for Life research program that, inspired by some of this work, set out to use more portable forms of learning history. On this project it was envisaged that learning histories would relate different peoples' experiences around the introduction of healthy eating guidelines to schools in Wales. Just as I completed writing this thesis, this project hit choppy waters during the validation process of these learning histories. At this point I sent my co-researchers my account of validation in Chapter 7 hot off the presses. Several of my colleagues commented that they found it enormously helpful. Though my research was set in a different context with different sensitivities, researchers found that my narrative related well to them *on the level of their experience*. Chapter 7 does not preach method; it shows it in all its messy glory. Another scholar practitioner of learning history recently read Chapter 7 with the purposes of aiding her understanding of an engagement that had two years before 'gone wrong'. She said: "I read that chapter and I was comforted by it but I also saw I'd messed up". She went on to say: "I look now at the work I did and see that it was good work, my intentions were good, it was good and I messed up". This is her story not mine. But I make the point here to show how her engagement with Chapter 7 held her still in that interesting place of Chapter 8's relaxed contradiction – a place that increasingly I see as a heuristic for deeper learning.

I conclude with a question asked of me in my viva: what is the quality of this piece of action research? In Chapter 6 of this thesis I presented quality criteria to guide my choices as I moved through this process of embedding myself in a field and working with a problem there. These were forward-going, practice-oriented criteria that would, if they worked, enable good action research. Did they work? To answer I turn to Hilary Bradbury's questions for assessing the quality of a piece of action research: how did the work make an impact in the world? What practical value has the work demonstrated? How has it been anchored in partnership? How has it been inclusive of many ways of knowing and how does it help build infrastructure for the future? (Bradbury 2007 in Roth and Bradbury 2008 p.360). Lying in the folds of this thesis is the answer to this. It is the picture that has resulted from the strokes, dashes and dots of my narrative arc. I will conclude by describing that picture as I see it now.

The work has made an impact in the field of local government by creating connections and collaborative learning experiences there. It has introduced points of self-awareness

and reflection at the individual, organisational and institutional level that have helped show the field to itself. And it has brokered the flow of knowledge and stories from one place to the next. From this increased awareness and knowledge have come new conversations, new actions and the articulation of new moves. Overall these amount to an increase in capacity for appropriate action in the face of climate change.

The research has also had an impact on the field of action research practice by articulating and developing the learning history method in more detail. It has done this not in isolation theoretically but in collaboration with other researchers on the Lowcarbonworks project and beyond. These researchers – as I mentioned above - have already found the field accounts and experiments on method to be of practical use. The experiments with aesthetic and fluid forms described in this thesis have been embraced by the Lowcarbonworks project and developed on from there. The ‘designer’ learning history in our final project report built on the prototype of my learning history form. It reveals a very exciting and engaging development. And in much the same way that recipients of my learning history booklets voiced relief and delight before even reading a line of the content, the recipients of the Lowcarbonworks final report have been similarly enthusiastic.



Figure 7: The luxury De Vere Grand Harbour Hotel connects for heating and cooling in 1994 (courtesy: Utilicom)

With each successful connection, though, the scheme grew in reputation and legitimacy. The BBC connected in 1990 and though local hotels appeared reluctant, French hotels IBIS and Novotel connected without a murmur a few years later.

Finally in 1994 the new five star De Vere Grand Harbour hotel agreed not only to connect to the heat system but to take advantage of the chilling that was made possible by an absorption chiller at the heat station. Costs for the new infrastructure were shared between the hotel and the scheme.

Researcher reflection: This sharing of the capital infrastructural cost reflects flexible financing and the ability to accrue cost-savings on a whole-life basis. It stands in stark contrast to the forces of lock-in mentioned earlier.

The scheme could now demonstrate capability in chilling as well as heating and the impressive façade of the luxury hotel put paid to any lingering associations between this district energy scheme and 'poor man's heating'.

Link to Theory

Social shaping of technology. It is interesting the French hotels played this important role. District energy is common in France and it is likely cultural acceptance made connection easier for the French hotel chains. So lock-in was broken in places and in so doing the meaning of the technology was being re-negotiated locally. The luxury hotel connection was significant because it challenged deep-rooted cultural resistances to district energy that may have underpinned some of the resistant forces.

That was one of the lightbulb moments and you think, yes, it's the network really that's important, after that you can plug in whatever energy sources you've got really. And so it was then we realised that our dream of having a large scheme actually, we could do this by adding CHP even though the geothermal resource was relatively small. (MS)



Figure 8 Holyrood: Council housing, the first standalone CHP scheme (Photo: Utilicom/SCC)

Phase 4: A lightbulb moment – Expanding the vision

In the mid-90s the focus and understanding of the scheme started to shift. Though it was and still is marketed as a geothermal scheme, the importance of the geothermal element was becoming less central. Gradually Bill, Mike and others were realising that it was the network and not the actual heat source that was important.

This shift in thinking was significant. It reconnected the team back to their original ambition – that of a larger district energy scheme around Southampton. This had been curtailed by the limited size of the aquifer, but now the vision was re-instated.

This liberated the team to think more imaginatively about potential sites for community energy that were further out and that didn't have a direct connection to the geothermal well.

One such site was the Holyrood council estate where 300 council flats needed new heating. Too far from the well, a small on-site CHP generator was installed instead and this supplied a standalone community energy network around the estate. This demonstrator then paved the way for connections to private residential clients and dispelled the belief that geothermal was essential to the growth of the overall scheme.

Figure 58 From the Lowcarbonworks final report: a designer take on a fluid learning history form

Experiments in form have not been confined to the written forms of learning history.

Throughout there has been a deliberate blending of multiple ways of knowing. Practical and experiential knowledge have been mediated through the presentational form of story in the learning histories. The presentational form of story has been taken very seriously as a form of knowing in its own right. At the end of the research there reside in the system stories, legitimised and valued and new that were not there when it started. And as I have described at some length propositional knowing has been continually levelled alongside experiential and practical ways of knowing. This is to be seen in the learning histories where theory is 'just' another perspective and it is to be seen in my overall way of working with theory where I have doggedly pursued its practical implications. And in the process of learning history – the events and presentations – there has been a conscious effort to experiment with aesthetic presentational forms that engage participants' practice and experience via their inner narrative arcs. Again the propositional has had its place but not an exalted one.

Finally partnership and building infrastructure for the future. I see the two as bound up together in that the one precedes the other. And together these quality criteria elide elegantly with my earlier point about 'change' being less about making something happen and more akin to a 'practice of transition'. The practice of transition, is for me one of connection. In the past three years I have created and facilitated connection. I have connected myself to individuals in the field and through the experience of learning history a deeper relational connection has resulted. This connection was one that, within the focus of our work together, was akin to partnership with those very qualities of trust, loyalty and respect that have surfaced over and again throughout this thesis and in the learning histories it describes. The learning history work also created partnership among participants – for moments at the workshop and in a more sustained way with the B&NES work. In late July 2009, Jane of B&NES wrote to the University endorsing the work we had done together. Of the participants she wrote:

Also, the.. participants [in the seminars], most of whom are Divisional Directors, now form the core of a new senior cross-departmental group of Divisional Directors overseeing the development and implementation of the whole corporate Climate Change Work Programme. I think this is first group of its kind in this Council

Jane Wildblood, e-mail to Peter and University of Bath management, July 2009

Here partnership, first mine with Jane and then the partnership within her organisation that was created at the seminars helped to build an infrastructure for the future. Similarly on the Lowcarbonworks project I started, necessarily because of project funding delays, working in isolation. However it was when I moved from lone ranger into partnership with my colleagues that the reach and scope of the work became far more extensive. This started with the Learning History workshop in February 2008 and concluded with the end of project conference in July 2009 which built on and developed what was prototyped in February. This was the conference with which I opened the preface.

Partnership at an organisational level or at the institutional level has been less forthcoming. As a project we have concluded that to effect policy at a national level we were impeded by not being adequately plugged into those organisations and networks that influence and drive the carbon reduction debate in the UK. We have realised that institutional sponsorship and partnership is an important ingredient that was missing. But building these links takes time and needs an underpinning of individual relational partnerships of trust and loyalty to support them. As we plan our next phase of research we are deliberately setting out to find institutional and organisational partners – and on account of our earlier work – we find that doors are now opening. It is a different kind of work to building individual relationship but the same kind of ‘push-pull’ energy applies. In July a policy maker from the Dept. of Energy and Climate Change gets in contact with me having heard about my work from a couple of different sources. She has a sense narrative has an important role to play in the challenge of helping communities move to green low carbon lifestyles. When I send her a paper I wrote about Merton she responds:

[It is] interesting. I had an instinctive feeling that Government needs to work with others to tell and share stories; now it all feels academically credible

June, 2009. E-mail from a UK policy maker in response to a paper I wrote about Merton.

Reading this I see a connection rather than an exchange of ideas between us. We will meet at the end of July to share these connections. Who knows what will happen.

So partnership perhaps must be built individually first before moving up and connecting these to our organisations and institutions. If change and innovation is, as I am

suggesting, a practice of connecting to an ongoing unknowable transition, then the first step of that process is to build a scaffold of relational connections into that transition and to take it on from there. This thesis has described the creation of that scaffold and the process of connection into a field I knew nothing about. And on this basis then the work has only just begun.

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Appendices

Appendix A - Active reading guide

As an **active reader** you are invited to find meanings pertinent to your own context and experience. Below is a suggested process that might be helpful.

Make Time – Aim to read the learning history when you are feeling fresh and in one uninterrupted stretch. The introductory lead-in describes what a learning history is and how to read it. These can be read at any time. The history itself starts on about page 10. We have set aside time so that you have a chance to enjoy the read rather than feeling pressurized by it.

THE BIG READ: STEP 1

Actively read the learning history – read freely and be watchful of your own responses to it. Highlight parts you find important. Write on the document as you go or make notes on post-its. Read the text however you wish. Skip bits or go back and forth. There may not be time to read all of it in detail. Don't worry – what's important is being engaged in whatever you are reading. Here are some prompts for the different kinds of things to watch out for and comment upon whilst reading:

The case itself - Comment on the substance of the history itself. Highlight what you find particularly engrossing or interesting.

Relevance to you - Watch out for events or descriptions of things that feel relevant to your situation: You may be reminded of something you have experienced or situations you have been in. Or something might strike you as being potentially useful and adaptable to a situation or challenge that you face today. Note these – describing if appropriate the situation - no matter if they are quite unconnected to what is described.

Ideas - Note anything that engages your interest - intellectually or otherwise – a thought or an idea perhaps or something that articulates something you kind of knew already but had never really thought of in that way. If a theme strikes you as important – comment on this – or

add a new theme if it is not already highlighted.

Feelings - Note the feelings evoked by the passages you read – for example: amusement, boredom, enjoyment, scepticism, enthusiasm and so on.

Questions - Record questions that arise for you on the reading. These might be questions that you would put to the original protagonist if he/she were there. Or questions for your own situation or others.

Appendix B - Active reader workbook

Worksheets

Learning History:

Your name (optional³⁸):

Permission to Copy:
(please write yes/no)

³⁸ Your name will not be used. These sheets are used as a data in the research to show how individuals react to the learning histories.

Worksheet 2: ABOUT THE CASE

What interested you?

Comments

*Thoughts,
Feelings,
Reactions*

*Questions 're
the case*

**Ideas/Elements/Themes of
interest**

Worksheet 3: ABOUT YOU

What was relevant to your situation?

*Reminds you of..
Your stories*

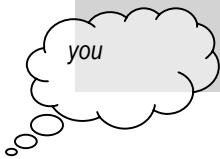
*Your
Challenges*

Your own questions

Ideas for you

Worksheet 1: QUICK WRAP-UP

Quick Wrap-up Statement



Write a quick, top of the head wrap-up statement of how you've found the experience of reading the learning history. This can include comments on the actual history, its relevance to you or more general comments on how you find the presentation of the document or this approach to learning.

Appendix C - Letter inviting perspectives on Merton



School of Management
Bath BA2 7AY United Kingdom
Telephone +44 (0)1225 383175

Researcher: Margaret Gearty, MSc
M.R.Gearty@bath.ac.uk
Tel: xxxxxx

Supervisor: Professor Peter Reason,
e-mail: mnsprwr@management.bath.ac.uk

Dear Merton history participant,

I've been passed your e-mail address by Adrian Hewitt of the London Borough of Merton. I am writing to let you know about case history research that I have been doing with Adrian that indirectly involves you.

The research is part of a major public funded EPSRC/ESRC Carbon Vision project called 'Lowcarbonworks' that is being led by the University of Bath. This is an action research project looking at how transformations to a low carbon future might be enabled. My particular research within that has been located in Local Authorities – where for the past 18 months I've been conducting what is called a Learning History of a handful of places across the UK where various innovative steps have been taken to reduce carbon (directly or indirectly). The research digs into the human story of what happened and explores how learning from such cases might be disseminated as widely as possible. It emphasizes the importance of co-learning between local authorities and others who are tackling carbon reduction. It is work therefore that is important in the wider public interest.

As part of this research, based on interviews with Adrian, I have created what is called a Learning History of the Merton Rule. In that learning history your name has been mentioned in some of the key scenes of the story of how this innovative piece of policy came about. So I am writing to make you aware of this research, to check if you would consent to having your real name used in the 'Learning History', and to warmly invite you to add your own recollections (or comments) to those parts of the Learning History that involve you.

The next page outlines the research and explains why I am approaching you in this way.

It also explains how these case histories are being used and why any input you might give, however short, would be of great value. I hope you will have a few minutes to respond and look forward to hearing from you.

Background to the research

Action research is a form of research that seeks to engage meaningfully with participants rather than extracting data from them. It is geared largely at finding value in the field - for participants and for the sustainability agenda in general. The Learning History being created is looking at examples such as the Nottingham Declaration, The Merton Rule etc. and presenting alongside an analytical take of these cases, the more human story of chance and endeavour that lies behind them.

Purpose of the Research

The research then sets about quite deliberately to amplify the impact of these examples of carbon reduction and to increase the level of learning from them. It seeks to do this in different ways. Firstly, by inviting people to engage with the Learning Histories, it is hoped to enlarge a mood of celebration and participation around the examples that have been documented. Second, by bringing people together to collaboratively ask how stories from one place might have relevance elsewhere, it is hoped that there can be a joining up of some of the different themes and lessons that are being documented.

Who will see the learning history?

The History is shown to and discussed with others participating in the research (generally people working in the field of sustainability in other Local Authorities or elsewhere) and also to wider audiences including academic audiences as well as research partners. There are plans too for multi-stakeholder events around these Learning Histories where again the contents would be shared a wider audience drawn from Local Government and other sectors. Some of the research may be published, in academic journals, or on a website. You would be notified of this should you wish.

Policy on making people anonymous.

The names of 3rd parties are anonymised by default. However, in the spirit of giving a real account of what happened and celebrating all the stakeholders involved, I seek permission from most of the 3rd parties to use their real names. The Learning History is written with due care and concern for all 3rd party's reputation or privacy. Permission to use real names is sought only from those for whom, based on the judgment of myself and the interviewee, there is little or no reputational risk. On the contrary, the desire is to acknowledge, indeed give credit for the part that you have played.

Invitation to read and comment on the Learning History.

You are invited to add your own recollection to the Learning History. Currently the 'history' is derived based on just one or two people's experience of events – inevitably there will be gaps on detail; certain events will be emphasised whilst others not. The research actively seeks to balance and enrich that with perspectives, comments and

stories from others who were involved. I stress that the research aims not to arrive at one agreed account of everything that happened. Rather it is trying to gather different perspectives and recollections that are hopefully not entirely incompatible! So you are invited to add any story or recollection of yours that fills a gap or casts a new slant on events described. You can do this in whatever way you see fit – via e-mail, by marking up the document, a phonecall or whatever you wish. If you would like to comment directly on the "word" document then please let me know and I will send it to you. If there's anything you'd like to clarify then please don't hesitate to contact me.

With best wishes,

Margaret Gearty

Appendix D - Highlights of research for participants

What is this Research about?

- This **PhD** research is part of a bigger research program (*LowCarbonWorks*³⁹ - under *Carbon Vision umbrella*) funded by ESRC/EPSC and being run at the University of Bath.
- It is an **Action research** program: i.e. it is designed to engage **with** people & have **value** for people rather than just 'extract' stuff.
- The research is trying to understand how **innovation for carbon reduction** in or connected with local authorities comes about and how we might **learn** from such innovation. It is doing this by developing a **learning history** of such innovations.
- The research is centered on the use of **low-carbon technologies** (e.g. CHP, Biomass and Solar PV etc) but includes too **innovative practices**, be they financial, economic or social, that are needed in order to enable such technologies (e.g. ESCO as in Woking, the Merton Rule, Housing Associations...)

Who and What's involved?

- A Learning History is produced based on **2-3 hour conversation/interview** with '*innovator(s)*' (one or two people who were closely connected with the proj and who are interested and willing to describe its highs and lows). Most people quite enjoy **taking time out to reflect** and talk about their experiences.
- The history includes direct quotes from interview, a story as well as thematic analysis to make it a **readable lively account**. Quotes and facts are checked back with the original innovator.
- The researcher then goes on to work with other stakeholders (e.g. other **LAs** but possibly other interested stakeholders like the NTrust) to see how they can learn from these innovations (**i.e. applied and aiming to be useful**)

³⁹ Formerly went under the name: Unlocking Low Carbon Potential

- Learning history could be used as a **resource** then by LA itself internally as part of its portfolio. The original innovator also can hear how others respond to the learning history.
- Learning History is **not a case study** - it is different – it keeps in some of the messy bits and the human story. It acknowledges each context is different - part of the research is to judge if this is helpful for others trying to innovate in different contexts. Links are made to theory too.
- Participant has opportunity to see and comment on other learning histories gathered in the research and is invited to participate in a Learning History **workshop** with stakeholders in **early 2008**. This event is designed as a learning and networking event and the innovator is invited to bring along one or two others from his/her local network to attend.
- Participant also has opportunity to participate in larger research program dialogue conferences planned for 2008

Appendix E- Learning history workshop flyer



lowcarbonworks

Unlocking Sustainable Futures

Achieving Carbon Reduction in Local Authorities

Tales of Vision, Chance and Determination

Bath, UK

Mon 25th pm – Tue 26th Feb, 2008

- How can we learn from places where there has been significant Carbon Reduction?
- What are the key lessons to be learned from the experience of those involved?
- Does achieving carbon reduction require a new way of working?
- How relevant are moments of chance and opportunity in achieving change?
- Are there new ways to join-up such successes and increase their impact?

The University of Bath, EPSRC/ESRC 'lowcarbonworks' Action Research program personally invites you to a workshop to explore questions such as these, to hear about exciting new research focussed in this area, and to develop ideas and actions that build on success. This event is endorsed by the Improvement & Development Agency (I&DeA)

At the workshop you will....

Hear about Learning History research carried out over the past 18 months that has explored innovative approaches to carbon reduction in Local Authorities.

Experience some of the 'human story' that lies behind innovations such as the Merton 10% rule, the Nottingham Declaration, and Barnsley's shift to Biomass and others **in the company of** those directly involved, including, among others:

Adrian Hewitt (Merton), **Dick Bradford** (Barnsley)

Mike Peverill (Nottingham) and

Steve Waller (I&DeA, formerly Nottingham)

Engage, working in smaller groups, with the learning histories asking how they might relate to challenges you face in your particular setting and what you might learn from them

Assess, as part of a larger group the themes arising from the research and **explore** how change for lower carbon might be achieved more rapidly.

Further Information

Venue:

Menzies Waterside Hotel (4 star)

Bath

(5 mins walk from Bath railway station)

Times:

Monday 25th Feb: 4:00pm – Late

Tuesday 26th Feb: 9.30am – 4.30pm

(see overleaf for outline programme)

Cost: £80 to include accommodation, dinner, lunch and teas/coffees.

This event is being subsidised by the EPSRC/ESRC Carbon Vision research program, 'lowcarbonworks'.

Interest in this event is expected to be high and places are limited to 40 so please respond early.

Who should attend?

Local authority innovators, sustainability champions, academic partners and interested stakeholders in carbon reduction from other sectors are being invited. This diverse group will be brought together in a lively and interactive setting that will include elements of storytelling, café style discussion and large group brainstorming.

To register for this event or for more information please contact

Kathryn Tate (Mon-Wed)

E: kat21@management.bath.ac.uk

T: 01225 383175



lowcarbonworks

Unlocking Sustainable Futures

Achieving Carbon Reduction in Local Authorities
Tales of Vision, Chance and Determination

Learning History Workshop
Outline Programme

Mon 25th pm – Tue 26th Feb, 2008

What is a Learning History?

A learning history is an approach to learning that seeks to combine story and analysis to render a real and messy account of any occurrence of interest. It a tale 'jointly told' between researcher and protagonist(s). In this research Margaret Gearty has worked with a handful of Local Authorities over the past 18 months to create a learning history on the subject of innovation for carbon reduction. The account produced is just one part of the learning history. As this is action research, wider participation in these learning histories is actively sought. Processes such as this workshop and other methods are designed to bring these histories to life. For more information on the research please email: M.R.Gearty@bath.ac.uk

Monday 25th Feb, 2008

4.00pm – Arrival and registration at the Menzies Hotel

4.30pm – Welcome and setting the scene

Formation of working groups.

Presentation of initial findings and themes from learning histories, story of the research process

7.30pm – Dinner, networking and "twice told tales"

Tuesday 27th Feb (9:30-4.30pm)

Morning – Learning history surgeries

Digging deeper. Exploring themes and resonances from the learning histories both in groups and individually. What sense do we make of them? What experiences and stories do they evoke from our practice elsewhere in the country?

What are we learning together?

Afternoon – Joining it all up: co-creating a shared learning history. How can we transfer lessons and learning from one place to another? What could be done to join up actions in tackling climate change? What could we do? Next steps.

4.30pm – Close and departure

The workshop will be facilitated by Dr. Geoff Mead, specialist in organizational story and narrative and co-founder of the Centre for Narrative Leadership. He will be joined by other members of the action research team from the Centre for Action Research in Professional Practice, at the University of Bath.



UNIVERSITY OF
BATH

CARPP
Centre for Action Research
in Professional Practice

I&DeA
improvement and development agency

Appendix F - Digital story of the learning history workshop

Please see inside of front cover or below for this disc.

Note that electronic versions of all five Learning History artefacts are also copied onto this disc.

Appendix G - Learning history artefacts

Accompanying the hardcopy of this thesis are the following Learning History booklets:

The Nottingham Declaration

Barnsley & Biomass: It's a no-brainer!

Kirklees: A lonely solar pioneer

Southampton District Energy Scheme

Electronic versions of these and the Merton Rule learning history are also included on the enclosed disc and should be printed 2 sheets per page on A4 to re-create the A5 booklet.

Please open electronically if you are accessing the online/electronic version.